DOCUMENT RESUME

ED 283 339 EC 192 768

TITLE	Project PLANTWORK: A Hirticulture Employment Initiative for Workers with Developmental Disabilities.
INSTITUTION	National Council for Therapy and Rehabilitation through Horticulture, Inc., Gaithersburg, MD.
SPONS AGENCY	Administration on Developmental Disabilities (DHHS), Washington, D.C.
PUB DATE	86
GRANT	DHHS-90DD0057/01
NOTE	93p.
AVAILABLE FROM	National Council for Therapy and Rehabilitation through Horticulture, 9220 Wightman Rd., Suite 300, Gaithersburg, MD 20879 ($15.00).
PUB TYPE	Guides - Non-Classroom Use (055) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Demonstration Programs; *Developmental Disabilities; Employment Opportunities; Employment Problems; *Horticulture; *Job Development; *Job Placement; *Job Training; Vocational Rehabilitation; Wages
IDENTIFIERS	*Project PLANTWORK; Projects with Industry

ABSTRACT

Intended for persons establishing job development programs for developmentally disabled individuals, this training manual details the structure and procedures of Project PLANTWORK, a 21-month demonstration program which placed approximately 70 workers with developmental disabilities into employment in horticulture industry firms or into horticulture-related jobs. It is noted that much of the project's success resulted from reducing the perceived risks of employers that these workers will increase overall labor costs. Among the proven approaches detailed in the manual are: adoption of the Projects With Industry (PWI) partnership between the business community and the rehabilitation community; utilization of wage subsidies and supplements for on-the-job training; provision of a personnel assistance program of screening and placement services; and networking with human service referral agencies. Sections discuss: general employment problems of workers with disabilities; the need to place workers with disabilities into employment; the conceptual framework of the PWI marketing, and Horticulture Hiring the Disabled (HHD) models; the horticultural industry; the job development process; Project PLANTWORK (including project population, new approaches, and goals); placement documentation; wage subsidies as a marketing tool; and project findings and developments. Appendices present an organizational chart and list of area offices, an annotated bibliography, and project placement forms. (CB)

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PROJECT PLANTWORK

A HORTICULTURE EMPLOYMENT INITIATIVE FOR WORKERS WITH DEVELOPMENTAL DISABILITIES

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PROJECT PLANTWORK

A HORTICULTURE EMPLOYMENT INITIATIVE FOR WORKERS WITH DEVELOPMENTAL DISABILITIES

The National Council for Therapy
And Rehabilitation through Horticulture, Inc.

Horticulture Hiring the Disabled

Supported in part by a grant from the U.S. Department of Health and Human Services, Office of Human Development Services, Administration on Developmental Disabilities, Grant #90DD0057/01.

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Editorial note: This publication was edited so as to reflect contemporary standards on proper usage of terms describing persons with disabilities. In instances where direct quotations were utilized these references were quoted verbatim.

Additional copies of this publication can be ordered from the:

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of
Human Development Services

Assistant Secretary
Washington DC 20201

Dear Colleague:

In November, 1983 President Reagan initiated a major step towards improving employment options for persons with developmental disabilities when he announced his Employment Initiative. In the short period since that announcement, this effort has gathered momentum and has made important breakthroughs. The Administration on Developmental Disabilities has taken the leadership role in promoting the Employment Initiative concept that Americans with severe disabilities can become valuable members of this nation's workforce.

The Developmental Disabilities Act of 1984 (Public Law 98-527) recognizes the crucial importance of employment in increasing the independence, productivity and community integration of persons with developmental disabilities. Beginning October 1986 "employment related activities" must be included as a priority service area in developmental disabilities State plans.

Project PLANTWORK was one of the first demonstration projects funded by the Administration on Developmental Disabilities under the Employment Initiative. As a special project of national significance, Project PLANTWORK has shown that horticultural employment of developmentally disabled persons can be greatly improved, enhanced and expanded. Through an industry-based adaptation of the Projects With Industry approach, Project PLANTWORK provides an excellent example of private sector cooperation and networking. It is my hope that the experience detailed in this publication will encourage employers and service organizations to promote the economic independence and productivity of even greater numbers of persons with developmental disabilities throughout our Nation.

Jean K. Elder

Jean K. Elder, Ph.D.
Acting Assistant Secretary for
Human Development Services

American Association of Nurserymen, Inc.
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July 3, 1986

Since 1983, the horticultural industry has worked closely with the National Council for Therapy and Rehabilitation through Horticulture to promote horticultural employment of disabled workers. I have had the pleasure of chairing the National Horticulture Industry Council which has provided leadership and guidance to this effort. Comprised of national leaders in horticulture and allied industries, this group has provided programmatic support and assistance to the Horticulture Hiring the Disabled Program (HHD).

Project PLANTWORK represents a special demonstration program under HHD to meet the manpower needs of horticultural employers. The project has fully demonstrated that through attention to employer needs developmentally disabled workers can be recruited, trained and successfully employed. Job opportunities for stable employment in nurseries, greenhouses, florist firms and landscape/grounds management sites exist throughout this country. The horticultural industry is proud to play an important role in employing greater numbers of persons with developmental disabilities, and in finding competent and productive new employees for this dynamic industry.

Robert F. Lederer
Executive Vice President
American Association of Nurserymen
Chairman
National Horticulture Industry Council

FOREWORD

Charles S. Richman
Executive Director
National Council for Therapy and Rehabilitation
through Horticulture

Exceptional progress has been made in but a few short years in recognizing the productivity and employability of persons with developmental disabilities. The Employment Initiative of the U.S. Department of Health and Human Services has provided the needed impetus to seek out new employment opportunities in the private sector. This renaissance in thinking and action has reached many employers who formerly would not have considered workers with developmental disabilities as suitable job candidates.

Project PLANTWORK is a national demonstration program which operated from October 1, 1984 through June 30, 1986. During this twenty-one month period some seventy workers with developmental disabilities were placed into employment in horticulture industry firms or into horticulture related jobs. The demonstration site for project job placements was Philadelphia, Pennsylvania and vicinity. The project demonstration site was operated under a subcontract with the Association for Retarded Citizens, Philadelphia Chapter (ARC/RAINBOW) as the Delaware Valley Area Office of HHD.

The purpose of this training manual is to detail the structure and procedures of the program and to show that persons with developmental disabilities can be successfully served utilizing the Projects With Industry (PWI) approach. The primary purpose of the PWI program is to encourage the formation of partnerships between the rehabilitation community and the business community in order to improve employment opportunities for persons with disabilities. Just five years ago only four PWI projects served persons with mental and developmental disabilities. Today, more than twenty-seven percent of all clients served by PWI programs are mentally retarded.

During the course of Project PLANTWORK it has been found that several approaches and techniques facilitate adaptation of basic PWI programs. These include:

- utilization of wage subsidies and supplements for on-the-job training;
- provision of a personnel assistance program of screening and placement services; and,
- networking with referring human services agencies.

Much of the success of the project has resulted from reducing the perceived risks of employers that workers with developmental disabilities will increase overall labor costs. Through the strategic and selective use of employer incentives it has been demonstrated that placeability of job candidates who are developmentally disabled can be greatly enhanced.

This training manual should provide programmatic ideas for those interested in establishing horticultural job development programs or job development programs for persons with developmental disabilities in other industries as well as existing PWI and job development programs interested in expanding services for clients who are developmentally disabled. It is hoped that Project PLANTWORK and this training manual will provide inspiration to others seeking to improve the employment prospects of persons with developmental disabilities.

ACKNOWLEDGEMENTS

The National Council for Therapy and Rehabilitation through Horticulture (NCTRH) wishes to acknowledge the contribution of many individuals who made this publication possible. The NCTRH staff contributed the concepts, ideas and efforts necessary to operate a successful project. These included:

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The Project PLANTWORK staff was supported by a Regional Horticulture Industry Council composed of industry leaders. This group was chaired by Alexander Hoskins, Director of the Fairmount Park Commission.

Editing assistance for this publication was provided by Leonard G. Perlman, Human Services Consultant.

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I. EMPLOYMENT PROBLEMS OF PERSONS WITH DISABILITIES

There is no question that persons with disabilities constitute a major segment of unemployed persons in this country. Only an estimated 9.8 million (43% of work age persons with disabilities) are engaged in competitive employment. In addition to chronic structural unemployment, there is significant underemployment of those that are employed. Many workers with disabilities are relegated to the "secondary labor market" where jobs are characterized by low level pay, low skill requirements, high turnover, minimal advancement opportunity, low fringe benefits and restricted work hours (part-time work). Even for those employed, some 63% are at or near the poverty level. (Bowe, Frank, "Handicapping America: Barriers to Disabled People", Harper and Row, New York, 1978).

Numerous studies have documented the relationship between disability and labor market participation. These analyses have shown that disability reduces labor supply irrespective of the measures used to estimate labor supply. For example, data from The Urban Institute, ("Report of the Comprehensive Service Needs Study", Washington, D.C., June 23, 1975) indicates the following:

- persons with disabilities have labor participation rates that are 5 to 25 percentage points lower than comparable rates for non-disabled persons;
- persons with disabilities tend to work 4 to 8 fewer weeks per year than the non-disabled; and,
- workers with disabilities are more likely to work part-time (35 hours per week or less).

Other research found that persons who are most severely disabled, including persons who have developmental disabilities, encounter a number of factors inhibiting labor market participation including: low educational attainment; lack of job experience; lack of job related skills; psychosocial barriers to employment; high job search costs; unavailability of low cost transportation; and economic disincentives resulting from economic support and transfer programs. The population which is developmentally disabled including persons who are mentally retarded, mentally ill, mentally restored, and congenitally disabled have the most difficulty in finding employment. (German, Pearl and Joseph Collins. "Disability and Work Adjustment", Social Security Administration, Washington, D.C., July 1974).

One major factor inhibiting employment of workers who are developmentally disabled is negative employer attitudes. Employers are generally reluctant to hire job applicants who are developmentally disabled. Virtually all studies of employer attitudes have found that most employers disfavor employing persons who are developmentally disabled. (Kohn, Andrew. "Minimum Wages and Handicapped Workers", Minimum Wage Study Commission, Washington, D.C., 1979). Over the years a public relations campaign to "Hire the Handicapped" has attempted to change these attitudes. (Jamero, Peter. "Handicapped Individuals in the Changing Workforce", *Journal of Contemporary Business*, Vol. 8, #4, Seattle, Washington, 1979).

Many studies indicate that employers are preoccupied with the perceived high cost of employing workers who are disabled. One such recent study indicated that employers see workers who are disabled as: being less productive; having higher rates of absenteeism; contributing to higher turnover rates; requiring costly physical and job modifications; and increasing overall labor costs. Despite the fact that there is considerable contrary evidence, such employer resistance based on an economic rationale is persistent and difficult to dispel. (Mithaug, Dennis. "Negative Employer Attitudes Toward Hiring the Handicapped: Fact or Fiction?", *Journal of Contemporary Business*, Vol. 8, #4, Seattle, Washington, 1979).

A recent study released by the U.S. Commission on Civil Rights documents that discrimination against persons with disabilities "continues to be a serious and pervasive social problem". Unemployment rates among workers with disabilities are estimated at between 50 to 75 percent (up from a pre-recession rate of 45 percent). Studies indicate that only in a minor percentage of cases, inability to perform a regular full-time job is the reason that a person having a disability is not employed. Between 15 and 25 percent of working age persons with epilepsy and only a handful of those with cerebral palsy have been able to secure employment.

The Civil Rights Commission study noted, "The inequality of employment opportunities results in general economic disparity for handicapped people. In 1977 the median family income of non-disabled individuals was nearly double that of the severely disabled population. Similarly, fewer than 30 percent of severely disabled persons have reported incomes of $15,000, or more..." Yet studies have indicated that impaired ability of people who are disabled accounts at most for a small proportion of the lower incomes they experience. (U.S. Commission on Civil Rights. "Accommodating the Spectrum of Individual Abilities", Clearinghouse Publication 81, September 1983). It is apparent that many of the employment problems encountered by workers who are developmentally disabled are with placeability rather than employability.

II. RECOGNIZING THE NEED

Introduction

Developing meaningful contacts with industry in order to place qualified workers with disabilities has been attempted in many ways over the years. This manual will describe the direction taken by NCTRH in facilitating job placement through industry networking. Before describing the Project it may be useful to describe how the sponsoring organization, the National Council for Therapy and Rehabilitation through Horticulture (NCTRH), became involved in job development programming.

In September 1981 the NCTRH Board of Directors authorized a special steering committee charged with developing service program options for the National Council. After exploring various approaches, they recommended the development of an industry-based Project With Industry (PWI) to be developed under the sponsorship of the organization. The National Council acknowledged that:

- the horticulture industry has a sustained need for trained and productive workers; and that,
- many persons who are disabled can help to meet the labor needs of the horticulture industry.

The National Council Executive Committee subsequently authorized a planning project to consult with key leaders in the horticulture industry in order to solicit their input and support. In a meeting held at the U.S. National Arboretum, Washington, D.C. on March 19, 1982, industry representatives agreed that there is a definite need to facilitate employment of workers with disabilities in the industry. A number of key representatives endorsed the PWI approach as an appropriate vehicle and pledged their support to such an effort. They also concluded that initially targeted jobs

should include those in retail, wholesale and service aspects of nursery, greenhouse, florist, landscaping, grounds maintenance, food processing and related horticulture businesses.

It was recognized that the NCTRH is in the best position to organize a horticulture industry PWI because of the composition and experience of the group and because of the heterogeneity of the industry. Industry representatives suggested that the National Council could provide a focal point for a national industry employment project for persons who are disabled through adopting a PWI approach. It was also concluded that subsequent industry support and assistance would be possible after an initial start-up grant was obtained under the federal PWI grant program.

Horticultural Therapy

The National Council for Therapy and Rehabilitation through Horticulture (NCTRH) is a professional association dedicated to promoting the use of horticultural therapy and rehabilitation activities. It is the primary national umbrella organization for individuals, service programs, institutions and commercial concerns interested in improving and expanding the use of horticultural therapy. This extremely useful form of therapy has been practiced in America since the mid-18th century. Through the utilization of horticultural activities the trained horticultural therapist seeks to improve psychological, social and physical adjustment or functioning and to train or educate. Horticultural therapy has been successfully applied in programs serving persons who are mentally and physically disabled, disadvantaged individuals, aged persons and other groups with special needs. Horticultural therapy programs are prevalent in psychiatric hospitals, rehabilitation facilities, nursing homes, half-way houses, arboreta and botanical gardens, schools, correctional facilities and other community settings and institutions.

The National Council

NCTRH was organized in 1973 by a small group of dedicated professionals in order to provide a national forum and resource for the field. Today, more than 750 individuals and some 90 organizations, businesses and commercial firms participate as members of the association. It is governed by a Board of Directors composed of 15 leaders representing the horticultural therapy movement. The NCTRH headquarters is located in the suburban metropolitan Washington, D.C. area in Gaithersburg, Maryland. Some of the major programs offered include:

- publication of a monthly newsletter, conference proceedings and other publications;
- sponsorship of a national annual conference and support of local and regional workshops and training programs;
- provision of professional consultation and technical assistance services;
- administration of a national registration and professional standards program; and,
- support of state and regional chapter organizations.

NCTRH Service Programs

In addition to regular membership service programs, NCTRH has also organized and operated a number of special service programs. These are direct service, research and demonstration efforts. Examples of such projects include:

- Horticultural Therapy Research Project - sponsored by the U.S. Department of Labor CETA Program to investigate utilization of horticultural therapy;
- Horticulture Hiring the Disabled (HHD) - sponsored by the U.S. Department of Education to establish a job development program for the horticulture industry;
- Project "HIRE" - sponsored by the U.S. Department of Education to expand job opportunities for persons who are disabled;
- Project PLANTWORK - sponsored by the U.S. Department of Health and Human Services to demonstrate job development techniques with persons who are developmentally disabled; and,
- HHD - TRANSITIONS - sponsored by the U.S. Department of Health and Human Services to demonstrate improvements in services to assist youth with developmental disabilities in their transition from school to work.

The initial employment related NCTRH program was Horticulture Hiring the Disabled which was approved for funding in October, 1982. This project resulted from the planning discussed earlier in this section. This project was funded for a three year period initially and is now entering its fifth year of operation. The HHD Project has acted as an umbrella concept which has been expanded, modified and improved over this period. Expansion of the Project has been both geographic and programmatic.

In 1983, HHD operated initially in two geographic localities while at the present time HHD operates in six separate sites. There has been a gradual expansion both in the numbers served and the types of disabilities of those persons who are placed into employment as the Project has progressed. With the initiation of Project PLANTWORK, attention to serving greater numbers of persons who are developmentally disabled has emerged. This emphasis has been closely tied to the U.S. Department of Health and Human Services' Employment Initiative. Most recently with the governmental priority upon transition services for youth who have disabilities, HHD has developed several demonstration sites to work with this population. Appendix A is a chart indicating the basic organizational framework, the sponsoring federal agency and the geographic location of HHD project sites. The structure and roles of the National Horticulture Industry Council (NHIC), Area Offices and Regional Horticulture Industry Council (RHIC) will be described in the next section.

III. THE CONCEPTUAL FRAMEWORK

The PWI Program

The basic conceptual framework underlying the HHD program is the Projects With Industry (PWI) program. The PWI program was authorized under the Rehabilitation Act (P.L. 93-112) of 1968 with the express purpose of assisting persons with disabilities in their efforts to secure employment in private industry. It is funded and administered through the Rehabilitation Services Administration of the Office of Special Education and Rehabilitation Services, U.S. Department of Education. The PWI concept involves the private sector (industry) in the design of placement, training and other services to individuals who are disabled. Developing a partnership between industry and vocational rehabilitation has provided a new and added dimension to traditional rehabilitation approaches. Bringing the employer into rehabilitation as a partner is a philosophical statement on how best to restore people to work. It is a pragmatic method of securing competitive employment which provides an effective and realistic outreach and marketing program.

Today, there are nearly 100 PWI projects operating across the United States. Many of these projects serve only a local area while others such as HHD are national in scope and may incorporate several local projects. In addition, the U.S. Department of Labor and other public and private organizations fund about another 100 sites. It is estimated that more than 66,000 workers with disabilities have been placed into competitive employment from 1970 to 1985. More than 5,000 businesses, corporations, labor unions and rehabilitation organizations have participated on PWI project advisory committees. In general, the types of services provided by PWI projects include client assessment; occupational training; employment orientation; job development, placement and follow up; and supportive services.

Each PWI project is organized with unique characteristics based upon their own geographic, philosophic and management characteristics. The common models described by the Jewish Vocational Service, Chicago, IL., Research Utilization Laboratory include:

- *Job Placement Model:* immediate, permanent, full-time, competitive employment is sought for "work ready" individuals who are disabled; this model is characterized by client selection, multiple placements in large firms and follow-along or job coaching;
- *Job Adjustment Model:* time-limited work experience is provided to prepare and qualify clients who are disabled for competitive employment; this model is characterized by use of work experience, rehabilitation support services, and trial work experiences using trusted employers; and,
- *Skills Training Model:* "work ready" clients with disabilities are taught specific technical skills prior to placement; this model is characterized by recruitment of higher level clients, group classroom instruction and use of employer/trainers.

(Burger, G.. "Program Models For Projects With Industry" RUL #9, Jewish Vocational Service Research Utilization Laboratory, Chicago, Illinois, 1978).

The Linkage or Marketing Model

In addition to these three basic models, another model known as the "linkage" or "marketing" model has developed and been described by the Electronics Industry Foundation PWI Project. (A Creative Partnership: Guidelines For The Development of a Project With Industry, Electronic Industries Foundation, Washington, D.C., March 1982). This industry-based model functions by facilitating existing employment systems and mechanisms. It is based upon market analysis and job matching which "markets" workers with disabilities. Many PWI projects, however, are not classifiable solely into one of these models and might be described as *combination models.* All models, no matter how configured, are time-limited, require close coordination of rehabilitation and business participants, and rely on a substantial number of referrals of clients with disabilities. The HHD PWI is a hybrid of all these models which utilizes a *job development approach.* The HHD version implies that a horticulture industry labor need is identified and that a process is undertaken to assure that this need is fulfilled. HHD is an industry *service program,* not a rehabilitation program; it markets the

abilities of workers with disabilities to meet a specific industry requirement. When HHD was developed in 1982, no other PWI or national employment project addressed the employment needs of the horticulture industry. Through its industry targeted marketing approach a new hybrid PWI model has evolved. For those readers interested in a more in-depth understanding of PWI, Appendix B provides an annotated bibliography of literature on the subject.

HHD-PWI Model

Horticulture Hiring the Disabled (HHD) as a national employment project is located in suburban Washington, D.C.. It is a service project of the National Council for Therapy and Rehabilitation through Horticulture (NCTRH). NCTRH is the legal entity responsible for receiving and expending the grant funds to implement the Project. The NCTRH Board of Directors and its Executive Committee supervise the activities of the Project ensuring that the goals and objectives of the grant are met and reviews budgetary matters.

The HHD National Project Office has six full-time employees—the National Project Director, Industry Job Specialist, Area Office Coordinator, Office Manager, and two Project Secretaries. The role of the National Project Office includes:

- providing overall management structure and project guidance;
- monitoring and supporting area offices;
- interpreting and responding to the National Horticulture Industry Council's advice and recommendations;
- informing the NCTRH Board of Directors about progress of the Project;
- developing national awareness of industry manpower needs and the capability of workers with disabilities to meet those needs;
- identifying national horticulture business and community needs;
- locating and recruiting local business participation for the Regional Horticulture Industry Councils;
- creating and supporting new placement and training opportunities;
- publicizing and promoting the Project through press releases, presentations, etc.; and,
- networking with national rehabilitation agencies and other appropriate governmental units.

The National Horticulture Industry Council (NHIC) was established by HHD as an industry advisory board to guide and support the Project in its efforts to place workers with disabilities in employment in the horticulture industry. The NHIC is composed of twenty-three (23) leaders in the horticulture industry and allied industries. Members of the NHIC represent national horticulture organizations, universities, government, industry executives, service directors as well as other national leaders. Members of the NHIC were selected in order to provide a broad cross-section of industry representation and on the basis of their personal power to influence attitudes and decisions through industry leadership. The NHIC Chairman provides leadership for the Council, calls meetings on a quarterly basis and makes committee assignments. The role of the NHIC is as follows:

- advisor/planner - advising, consulting, counseling and informing on all aspects of national manpower development in the horticulture industry;
- broker - promoting and developing training programs, negotiating with government and industry representatives, establishing contacts, providing technical advice and assistance, etc.;
- linker - providing local and area referrals and industry contacts; and,
- influencer - assisting in public relations for the Project and influencing attitudes within the industry to provide a conducive atmosphere for achieving job placement.

HHD Area Offices operate under an annual contract with the National Project Office to provide job development and placement services for persons having disabilities within a defined geographical area. Area Office sites are located in parts of the country which have been identified by the NHIC as primary horticulture industry areas. In addition, each area operation is located in an area in which a reasonable demand for qualified horticulture employees is expected. The role of the Area Office includes:

- developing local/regional horticulture manpower needs data; generating on-the-job training slots;
- operating in-house horticulture training programs;
- recruiting and placing workers with disabilities;
- providing technical assistance and advice to rehabilitation organizations in horticulture program development;
- establishing operating horticulture employment and training systems and standards; and,
- arranging for required services, such as client assessment, occupational training, employment orientation, job development, placement, follow-up and supportive services.

A major role of the Area Office is supporting the operation of a Regional Horticulture Industry Council (RHIC). The RHIC advises and provides local industry guidance to the HHD Area Office. It is composed of 15-20 local leaders in the horticulture industry and allied fields with additional representation from state vocational rehabilitation agencies, training agencies, manpower organizations and other key community leaders recommended and recruited by the National Horticulture Industry Council. Local leaders are formally invited to serve on the Regional Horticulture Industry Council by the Chairman of the National Horticulture Industry Council. When local leaders agree to serve, the Chairman of the NHIC sends a formal letter of appointment to each candidate. This procedure is also followed in the filling of any vacancies created by resignations of RHIC members. The role of the RHIC includes:

- operating as a policy advisor to the Area Office by advising on horticulture training, employment and placement programs to be developed and carried out by HHD Area Offices;
- assisting in public relations for the Area Office helping to influence industry attitudes on a local level;
- providing information on local labor needs, specialized crops and regional industry trends;
- identifying industry needs and pinpointing existing problems and barriers to employment of workers with disabilities; and,
- establishing a programmatic focus for the Area Office.

Since project placement activities occur at the local level it has been important to carefully select industry and (re)habilitation representatives that have an interest and commitment to the employment of workers with disabilities.

Candidates for membership on the RHIC possess a combination of qualities which may include:

- personal power or access to personal power;
- recognition by their peers as opinion leaders;
- possession of decision-making skills;
- high levels of achievement; and,
- commitment to helping persons with disabilities.

Each RHIC member is selected based upon the specific resources that member brings to the group. The development of a power base to act as a positive change agent is the primary function of a RHIC member. RHIC members must act collectively to utilize their personal power in a positive manner to achieve the goals of the Project.

Major components of the horticulture industry which are represented on the RHIC include: grounds maintenance; retail and wholesale nurseries; arborist services; florists; interior plantscapers; lawn care services; agriculture extension specialists; landscaping contractors; and other lawn and garden firms. Representation includes trade and business persons; agriculture and horticulture association representatives; university faculty; extension agents; and other technical representatives. Normally the majority of RHIC members are identifiable as horticultural representatives.

An evaluation of the PWI Program by Policy Studies Associates concluded that four major factors are critical to successful PWI project performance:

- private sector linkages;
- state rehabilitation agency linkages;
- employment performance of clients; and,
- the business orientation of the project.

The study singles out the quality of private sector linkages as the most important factor. Good relationships with employers are typically reflected and shaped by a project advisory council that is *actively involved* in all aspects of project implementation. The selection of a representative body is often critical to the ongoing private sector linkages. (Reisner, Elizabeth et al. . . "Assessment of the Projects With Industry Program", Policy Studies Associates, Washington, D.C., April, 1983).

IV. DEFINING THE HORTICULTURE INDUSTRY

Relationship to Agriculture

Horticulture is the branch of agriculture dealing with intensively cultivated plants directly used for food, aesthetic or medicinal purposes. It includes landscaping, production, storage, and marketing of fruits, vegetables, flowers and nursery crops. In contrast to agronomy which includes "field crops" consisting mainly of grains and forage, horticulture deals with so-called "garden crops". "Garden crops" are generally intensively cultivated, warranting a major input of capital, labor and technology per unit area of land.

Horticulture represents an important industrial and business component of agri-business, by virtue of its dollar value, number of employed workers, and by its diversity. The practice of horticulture is an art, science, business and profession which starts with the propagation and cultivation of plants and extends through processing and food technology to wholesale and retail distribution. The retail value of horticultural products after being processed, transported, and marketed is almost $20 billion (about fourteen percent of annual farm receipts).

Horticulture jobs and careers are both numerous and diverse and include governmental as well as private sector employment. In addition to salaried employment there are many opportunities for seasonal employment, self-employment and business ownership. The industry includes commercial aspects related to both horticultural products and services:

- *horticultural products*—vegetables, nursery products, greenhouse products, orchard products, lawn supplies, sod, seeds, ornamental plants, flowers and floral supplies, food processing and other horticultural products produced for primary processing.

- *horticultural services and sales*—landscaping, (exterior and interior) lawn and garden services, floral services, ornamental tree and shrub services, grounds maintenance, retail garden center sales and other horticultural services related to planning, planting or the care of ornamental plants, fruits, vegetables or medicinal plants.
- *related horticultural industry*—producers of materials and equipment directly related to the growing, servicing or primary processing of horticultural products; and horticulturally oriented organizations, institutions, educational or trade associations.

It is also important to note that horticultural employment also includes those support personnel necessary to maintain, manage and operate wholesale, retail and service oriented horticultural businesses (clerks, secretaries, bookkeepers, etc.).

For the past decade horticultural services have been the fastest growing segment of agri-business in number of new business establishments, gross receipts, payroll and number of employees. This continuing expansion reflects our society's increasing environmental and ecological concern and the development of a multi-million dollar home lawn care and landscaping trade. This has also been reflected in the resurgence of home gardening, with more than 38 million Americans tending vegetable gardens.

Jobs in Horticulture

Current data on the horticulture industry indicate that **jobs in this sector of the economy are plentiful and that job growth in the coming decade will be substantial.** According to U.S. Census data in the 1979 Census of Agriculture and other sources:

- 235,000 establishments provide horticulture products and services in the United States;
- 530,000 workers are presently employed by these firms; and,
- $2.6 billion was paid in wages and salaries.

(U.S. Department of Commerce. "Volume 5 Special Reports Part 7", 1979 Census of Horticultural Specialties, Washington, D.C., April, 1982).

In the past decade (1970 to 1980) employment in the industry showed a forty percent (40%) increase. For the 1980's it is projected by the U.S. Department of Labor that:

- employment will grow by more than 102,000 workers (to total 630,000 workers);
- there will be a twenty percent (20%) increase in total employment; and,
- the industry will retain and newly employ workers in landscape and horticultural service firms, retail and wholesale suppliers, and retail florists.

(U.S. Department of Labor, Bureau of Labor Statistics. "The National Industry-Organization Employment Matrix 1970, 1980 and Projected 1990", Vol. II, Bulletin 2086, Washington, D.C.).

Horticultural jobs can be found in every community in our nation. These include those at the local garden center, florist, nursery, landscaper, etc.. A majority of horticultural plant materials are produced in some ten (10) states including California, Florida, Pennsylvania, Ohio, Texas, Michigan, Illinois, New York, Oregon and Washington. California, Florida, and Pennsylvania are the leading states in horticultural services including landscaping, lawn and garden, and tree services.

These jobs include employment at the production, wholesale, retail and service levels which employ large numbers of laborers, transport and equipment operators, clerical workers, managers, sales personnel and professional workers. Many horticultural jobs exist in the manufacture and supply of primary goods consumed by horticultural firms. Some examples of these allied industries include: seeds, chemicals, structures, containers, composters, greenhouses, watering and irrigation systems, mulches and soils, lawn mowers, garden tools, tractors, etc. . . . Furthermore, any business which has landscaped properties has a need for groundskeepers and exterior maintenance workers. These workers are also considered to be part of the horticulture industry.

Entry Level Employment

Employment opportunities in primary horticultural industries as well as support industries and secondary industries will be abundant through the turn of the century. The expansion of horticulture services and retail sales is reflected in the tremendous expansion of lawn care services and retail flower distribution in supermarkets and convenience stores. Landscape maintenance at large commercial sites, municipal grounds, residential communities, office parks, shopping centers, hotels, resorts, hospitals, etc. currently has created a high demand for entry level workers ("Budding Opportunities", *Forbes*, May 19, 1986).

Despite the ever-increasing demand for entry level workers in horticulture, the supply of workers is decreasing. More jobs are being created in service industries such as horticulture while recruitment of new workers is lagging. It is projected that by 1987 there will be a net negative gain in the labor force, i.e. more workers will be leaving the labor force than are entering. This will be an opportune time for workers who have developmental disabilities to be entering into the work force. Worker scarcity will mean that horticultural employers will see these candidates as good prospects. They will need recruitment assistance and services which will help funnel workers with disabilities into entry level job openings. To date, HHD has directly placed an overall total of 570 workers with disabilities into horticulture jobs nationwide. This number is expected to increase significantly as labor shortages become greater.

V. THE JOB DEVELOPMENT PROCESS

The ultimate measure of project success is determined by the extent and quality of resulting job placements. The HHD job developer at the Area Office level is the focal point for these activities. To be successful, the placement specialist must be highly visible in the employer community. The placement specialist is a marketing specialist who identifies and creates employment needs and fills these needs with workers with disabilities. The placement specialist must keep up with labor market changes and be thoroughly familiar with resources such as:

- the Occupational Outlook Handbook;
- business magazines (Forbes, Fortune, U.S. News & World Report, Florists' Review, Grower Talks, Interior Plantscaping, Allied Landscaping Industries (ALI), etc.);
- business sections of newspapers; and,
- company magazines and newsletters.

Other sources of employment information can be gathered by:

- attending local trade meetings;
- contacts with local agriculture extension agents;
- visits to state employment offices;
- referrals from private employment agencies; and,
- networking with acquaintances, friends and other contacts.

It should be noted that approximately eighty percent (80%) of all available jobs are not publicized ("The Hidden Job Market", *U.S. News & World Report*, February 24, 1975, p. 62). This points up the importance of networking and industry contacts.

Prior to making employer contacts, the placement specialist should develop a marketing strategy plan. The first task is to gather information on the potential employer. This information may include such data as:

- the type of products or services;
- location;
- seasonal trends;
- number of employees;
- hiring practices;
- turnover rate;
- union or non-union status;
- personnel with hiring authority;
- entrance requirements; and,
- the company's future outlook.

A thorough plan will require labor market information which defines industry labor needs and makes job development programs responsive to these needs. It is important to determine the number and type of existing job vacancies; growth potential by occupation; specific job requirements; occupational skill requirements; and employer attitudes towards employment and training programs. Conventional sources of existing labor market data and information include the Job and Employment Services; Economic and Community Development Agencies; Private Industry Councils; Economic Development Councils; Department of Labor Regional Labor, Employment and Training Administration Offices; and, State Occupational Information Coordinating Committees. The National and Regional Horticulture Industry Councils are relied upon to provide industry data and to verify the accuracy of labor market estimates.

All too often contacting employers is regarded as being difficult, time consuming and threatening to both the placement specialist and the employer. If this important activity is viewed in this manner, the number and quality of the placements will be less than adequate. Employer contacts are the most productive activity that Area Offices undertake and a positive attitude has proved to be an extremely valuable asset. Based upon the labor market information obtained earlier, the placement specialist can develop a strategy to deal with employer needs and to anticipate any objections that might be raised as to the abilities of applicants or candidates with disabilities. For example, if the turnover rate is high then the placement specialist might make suggestions on how to improve employee retention. The placement specialist is in an excellent position to assist the employer in solving problems associated with personnel employment and management . . . but

only if they have gathered relevant and specific information that is of interest to the employer. It should also be noted that the placement specialist must utilize common terms related to horticulture. This will facilitate full communication with industry employers.

The HHD Area Offices also maintain regular contact and involvement with the various private and public state rehabilitation agencies. The ability to successfully network with these agencies is a critical factor in developing reliable and stable sources of referrals. In most cases the placement specialist, through the RHIC and networking with the various community agencies has developed a "Work Ready Candidates" list. The matching of the job to the person with a disability is important to the screening interview which takes place between the person who is disabled, the VR counselor and the placement specialist. A public relations program highlighting Area Office accomplishments has also helped facilitate the efforts of the placement specialist.

VI. PROJECT PLANTWORK— A DEMONSTRATION PROGRAM

Introduction

The program known as Project PLANTWORK was designed and organized to demonstrate and test the effectiveness of previously untried techniques for training and employing greater numbers of workers with developmental disabilities within the horticulture industry. It creatively combined and integrated successful placement and employment techniques for persons with developmental disabilities with several new applications and approaches. This hybrid technique was directed at meeting the Office of Human Development Services' Discretionary Priority designated as "Strategies for Increasing Social and Economic Self Sufficiency".

Project PLANTWORK focused on the development of strategies which depart from traditional human services/employment approaches and emphasized:

- local solutions;
- reliance on existing resources;
- private sector involvement; and,
- linkages between existing organizations.

The overall purpose of Project PLANTWORK was to demonstrate new ways by which the horticulture industry can recruit, train and place individuals who are developmentally disabled within their established workforce. This generated information and data which will provide not only permanent full-time or part-time employment, but should be readily adaptable for national replication.

The Project responded to the purposes set forth in the announcement by the Administration on Developmental Disabilities by:

- devising a demonstration that developed insightful new ways of addressing human service problems;
- improving the delivery and management of social services;
- drawing upon new ideas from contemporary job development projects and activities; and,
- increasing the social and economic self-sufficiency of adults with developmental disabilities through socioeconomic development strategies.

Project PLANTWORK was established and operated as an entirely new activity. It was the intent of the Project to operate an innovative demonstration program for persons who are developmentally disabled which:

- encouraged competitive employment, while reducing or preventing dependency on publicly supported social services;
- permitted entry and retention in the labor market through horticulture industry and employer involvement; and,
- identified new work opportunities in the horticulture industry which are appropriate.

Project Population

Project PLANTWORK provided employment services to persons with developmental disabilities to improve their economic status. In the past six years the statutory definition of "developmental disabilities" has been substantially modified. Title V, Section 102 (7) of the "Rehabilitation, Comprehensive Services and Developmental Disabilities Amendments of 1978" (P.L. 95-602) offers this new legal term of art. This so called "new definition", is a major departure from the traditional categorical definition in conventional use for many years.

The conventional definition, specified in the prior legislation, consisted of a diagnostic or categorical approach. The statutory language identified "developmental disability" as a "disability attributable to mental retardation, cerebral palsy, epilepsy, or autism . . . attributable to any other condition closely related to mental retardation" . . . or "attributable to dyslexia." In addition, the definition specified that developmental disabilities:

- originate prior to the age of eighteen;
- continue or are expected to continue indefinitely; and,
- constitute a substantial handicap to the ability to normally function in society.

In contrast, the present definition is solely based upon an individual's functional limitations (irrespective of diagnostic category). This non-categorical definition specifies that a "developmental disability is a severe, chronic disability" which:

- is attributable to a mental, physical or multiple impairment;
- is manifested prior to the age of twenty-two (early onset);
- is likely to continue indefinitely;
- results in substantial functional limitation in such major life activities as self-care; receptive and expressive language; learning; mobility; self-direction; capacity for independent living; and economic sufficiency; and,
- requires on-going coordinated services which are interdisciplinary or generic, individualized and spanning a life-long or extended period.

The differentiation of this functional definition was considered in the operation of Project PLANTWORK. When the term "developmental disability" was first introduced in federal legislation, individuals who are mentally retarded were perceived as a major portion of the population of a greater population whose substantial and continuing handicaps originated early in life and required a coordinated and on-going programmatic service. This was without limitation/restriction by age, discipline, or service system. According to a special study mandated by P.L. 95-102 (which was designed to analyze the impact of the definitional change), State Developmental Disabilities Planning Councils estimate there is an estimated overall 10.7% decrease in individuals with mental retardation who are defined as developmentally disabled. There is an estimated overall 10.1% increase in other individuals including those who are socially impaired, learning disabled, deaf-blind, multiply disabled, and who have cystic fibrosis, spina bifida, muscular dystrophy, deafness and osteogenesis imperfecta, identified as being developmentally disabled; and, there is an estimated overall population of 3.9 million individuals who are developmentally disabled (a reduction of 1.36 million or 26% from the older definition) as noted above.

The Need for New Approaches

Despite the need for new hires as noted earlier many horticulture firms are encountering problems in recruiting and retaining personnel. For example, a recent meeting of flowering and foliage plant producers concluded that, "the number of people willing to work in greenhouses has decreased . . . A greater effort must be made to train workers through improved communication. In some parts of the country, growers may have to teach some employees reading and writing skills." ("Flowering and Foliage Plant Producers Discuss Industry Strategies", *Florist's Review*, April 7, 1983). Many industry experts have indicated that workers with disabilities can effectively fill the recruitment gap currently experienced by the horticulture industry. Just a few of the selective comments received by the Horticulture Hiring the Disabled Project reflect this view.

Robert F. Lederer, Executive Vice President of the American Association of Nurserymen, Inc. asserts:

> ". . .frankly we believe large numbers of physically and mentally disabled workers would be hired by our industry if your project is successful."

According to Earl Copus, Jr., Executive Director of the Melwood Horticulture Training Center, Upper, Marlboro, Maryland:

> ". . . we have across the United States hundreds of horticultural training programs preparing thousands of disabled people desiring and needing employment in the horticultural and agricultural industries. Statistics show that the 'service' employment areas of the horticultural industries in particular are continuing to show rapid growth . . . The PWI design which brings industry into an active advisory (training) and job facilitating structure is excellent and critically needed."

David H. Sisson, former Construction Director of Safeway Stores, Inc., affirms:

> " . . . The need for skilled horticulturists is constantly on the increase, while the labor supply for those willing and able to do this demanding and tedious work seems to be on the decrease . . . I certainly believe this effort is worthy of full consideration. Disabled workers will clearly be helpful here."

In England it was demonstrated that workers with developmental disabilities can fill an important role in meeting horticulture industry labor needs. In fact, in that country the horticulture industry is currently one of the major employers of workers with developmental disabilities. ("Horticulture Now", Supplement to *Grower*, January 20, 1983). However, in this country very few workers with disabilities are placed into horticulture work. For example, 1979 data of the State/Federal Vocational Rehabilitation (VR) Program indicate that less than three percent (3%) of all VR clients are rehabilitated into agriculture/horticulture employment. This represents one of the smallest categories listed.

Several years ago in the Netherlands it was demonstrated that persons with physical and mental disabilities can successfully complete horticultural training and enter into horticulture employment. Horticultural training has been provided at the Werkenrode National Vocational Training and Education Center since 1979. Training is provided for florist, nursery, arborist, public park personnel, and gardening jobs. Practicum work experiences are carried out in nurseries, market gardens, florist shops, public gardens, and institutional gardens. It remained to be demonstrated in this country that horticultural work preparation and placement could work here.

It was the goal of Project PLANTWORK to facilitate job recruitment of workers with developmental disabilities into meaningful horticulture employment. Project results to be discussed in Section IX demonstrate that the Project was successful in meeting this goal.

During the past decade traditional approaches to training, vocational development and employment/placement services for persons with severe disabilities have come under public policy scrutiny. In particular, there has been much debate regarding the role and effectiveness of sheltered workshops. There are now some 8,144 programs certified by the U.S. Department of Labor which are within 4,782 separate sheltered workshops. About eighty-one percent (81%) are certified as work activities centers for workers with marginal productivity who are paid less than fifty percent (50%) of the minimum wage. Clients served in these programs are severely disabled and most recent estimates indicate that some of the 200,000 persons served daily are now mentally disabled, while only ten percent (10%) are physically disabled. (National Association of Rehabilitation Facilities. *Rehabilitation Review*, Vol. IV, #18, May 9, 1983).

During 1979-81, the U.S. Department of Health and Human Services conducted a series of program evaluation studies, "Training and Employment Services Policy Analysis (TESPA)". The study reviewed available data (including the 1975 HEW study "The Role of the Sheltered Workshops in

the Rehabilitation of the Severely Handicapped", the DOL Sheltered Workshop Study, The Urban Institute, "Comprehensive Service Needs Study", etc.). The TESPA summary concluded: "All of the studies and conferences seem to agree on certain fundamental thrusts: **Workshops perform an important role in meeting the needs of severely disabled persons, severity of disability is the most common reason for failure of a provider to serve a disabled person, workshops have substantial financial problems, and action must be taken to improve the income of severely disabled persons.**" (Whitehead, Claude. "Training and Employment Services Policy Analysis —A look at Community Based Services for Handicapped Individuals", First Year Progress Report, U.S. Department of HEW, Washington, D.C., September 1, 1979). Several of the major problems which inhibit the effectiveness of sheltered workshops identified in the study include:

- *Low Level Placement Success*—there is a lack of movement of clients from the workshop into competitive employment; and,
- *Inadequate Job Preparation and Job Development*—there are limited linkages between workshops and private business.

(Whitehead, Claude. "Final Report—Training and Employment Services for Handicapped Individuals in Sheltered Workshops", U.S. Department of Health and Human Services, March, 1981).

Many persons with developmental disabilities currently served in sheltered workshops and other rehabilitation centers could become competitively employed if improvements could be made in these two areas. There have been a number of vocational development alternatives suggested. They represent an eclectic group of approaches which deal with the difficulty of employing workers who are severely disabled by:

- setting up alternative industrial employment situations; or by,
- subsidizing employers through wage or tax relief schemes.

A number of "social employment" alternatives have been suggested or discussed in the literature. These include enclaves in private industry; public employment in government operated factories; handicapped cooperatives; public works and outdoor employment; relief work; archive work; and semi-sheltered work (wage subsidized work in private employment). However, such efforts have been limited, sporadic and not fully documented or evaluated in this country. (Vash, Carolyn. "Sheltered Industrial Employment", Institute for Research Utilization, Washington, D.C., 1977). Supported work has received recent attention and is currently being explored

and tested as a viable alternative.

As has been indicated, one overall employment approach which has gained recognition and acceptance during the past decade is the Projects With Industry (PWI) effort. This eighteen year old program first authorized under the Vocational Rehabilitation Amendment of 1968 (P.L. 93-112), provides for a joint partnership between employers and rehabilitation organizations. The PWI job development strategy relies upon four basic assumptions:

- Actual work settings provide the most reliable means for evaluating the skills and attitudes of potential employees and for preparing them for competitive employment;
- Employers need special assistance and advisement in recruiting, training and employing workers with disabilities;
- Employers can best identify job opportunities for workers who are disabled, define job qualifications and design special training programs; and,
- Establishing programs to employ workers with disabilities not only benefits those workers, but also the industry employer.

(Pati, Gopal C. and Glenn Morrison. "Enabling the Disabled", *Harvard Business Review*, Vol. 60 #4, Special Report #82412, July—August, 1982).

It has been asserted that PWI is one of the most effective means of helping individuals with disabilities into gainful employment. Since 1968 more than 200 project sites have been established under funding from the U.S. Department of Labor, U.S. Department of Education and other public/private funding sources. All PWI projects sponsored by the U.S. Department of Education are required to operate a business advisory council. Such advisory bodies operate to provide guidance, assistance and advice to PWI efforts. (Devins, Walter. "PWI Overview", *American Rehabilitation*, U.S. Department of Education, Jan-Feb-Mar, 1984).

In addition to this common characteristic mentioned in Section III, PWI's operate using a variety of job placement and job development techniques. These include:

- on-the-job training;
- prevocational and other job readiness training;
- special orientation and training for work experience;
- supportive services (job coaching, basic education, personal adjustment training, job counseling, etc.);

- assistance from special employment personnel; and,
- trial employment.

Despite their evident success, significant numbers of persons with developmental disabilities had not been served by existing PWI projects. Just five years ago only four such projects primarily served those individuals with problems related to mental illness or mental retardation. One such long-standing and successful project is the program operated by Fountain House, New York for individuals who are mentally restored. Today a number of projects serve persons having developmental disabilities within a multi-disability focus. In fact since Project PLANTWORK began, the number of persons with developmental disabilities served by PWI programs has expanded substantially.

Project PLANTWORK has selectively modified the basic PWI model by utilizing employer subsidies as training and recruitment inducements. Service modifications involved the exploration of a new approach to group placement, the Personnel Assistance Program. The basic components of the modified PWI PLANTWORK model included:

- close involvement and participation of horticultural employers;
- a targeted marketing approach to reach these employers;
- provision of a no-cost recruitment and screening service as a labor market intermediary (between the employer and human service agency);
- a performance contracting approach for area office operations, with a specified number of expected placements;
- a labor exchange philosophy based upon the assumption that the demand for horticultural workers exceeds the supply of qualified candidates; and,
- use of untested techniques such as group placement and employer wage subsidy approaches.

It is assumed that a major barrier to employment for most persons with developmental disabilities is placeability rather than employability. That is, productivity is not a major barrier, but the appearance, stigma, or prejudice of employers inhibits placement of otherwise employable individuals. Under the Project PLANTWORK wage subsidy approach an employer recruitment subsidy was paid to employers for a "new hire". The subsidy covered up to fifty percent (50%) of entry-level wages for up to the initial one hundred-sixty (160) hours of employment of on-the-job training. Where appropriate, Targeted Jobs Tax Credits were utilized to supplement this initial subsidy as a further inducement to the employer. The subsidy was obligated on a case-by-

case basis and based on the entry wage and training period required and in no instance did the subsidy exceed $800 per employee. In addition, other support sources such as National Association of Retarded Citizens On-The-Job Training funds were utilized when these were available and appropriate.

Project Goals

The goals and related tasks of the project fell into four major areas. These goals and associated tasks were as follows:

1. *PROCESS GOAL*—to identify new linkages and communication opportunities between the horticulture industry and habilitation/training program for persons with developmental disabilities.

   (a) To support a Regional Horticulture Industry Council concerned with policies related to the employment and training of workers with developmental disabilities.
   (b) To establish an area demonstration site and Area Horticulture Industry Council in order to develop job training and placement opportunities.
   (c) To identify and select on-the-job training opportunities in horticulture work for workers with developmental disabilities.
   (d) To develop supplementary funds and other assistance in order to further develop a national horticulture network for workers with developmental disabilities.

2. *TRAINING GOAL*—to develop new and improved training methods in order to prepare persons with developmental disabilities for horticultural work.

   (a) To identify community service programs involved in horticulture habilitation and training of clients with developmental disabilities.
   (b) To determine adaptations to existing training methods, curricula, etc. necessary to prepare persons who are developmentally disabled for horticultural employment.
   (c) To facilitate the collaboration and liaison of the horticulture industry with service organizations which assist persons with developmental disabilities.
   (d) To provide technical assistance, advice and information to the horticulture industry on opportunities to recruit, train and hire workers with developmental disabilities. To provide technical

assistance to horticulture (re)habilitation and training programs on improving services to trainees who are developmentally disabled.

3. *INFORMATION GOAL*—to investigate and identify appropriate employment opportunities for persons who are developmentally disabled and manpower requirements of subcomponents of the horticulture industry.

   (a) To identify national, regional and local labor market information on manpower needs and trends in the horticulture industry.
   (b) To determine labor market or employment entry barriers existing to employment of workers with developmental disabilities in the horticulture industry.
   (c) To examine horticulture work requirements and job specifications in order to identify job modifications or accommodations necessary to employ greater numbers of workers with developmental disabilities.
   (d) To analyze horticulture hiring practices, labor force composition, personnel policies, and employer attitudes relative to employment of workers with developmental disabilities.

4. *DEMONSTRATION GOAL*—to demonstrate selective use of hiring incentives, wage subsidies, tax credits or other inducements in facilitating employment of persons with developmental disabilities in horticulture and to disseminate this information through a technology transfer program.

   (a) To provide direct assistance to horticulture employers on utilizing wage subsidies.
   (b) To develop information publications for horticulture employers on the nature, use and availability of governmental and other employment incentives.
   (c) To disseminate information and results of the Project to the human services community including existing community service programs, PWI projects and developmental disabilities providers.
   (d) To disseminate information and results of the Project to the horticulture community.

VII. PLACEMENT DOCUMENTATION

Qualified Job Placement

The Project PLANTWORK Area Office was required to submit documentation on all placements to assure that persons with developmental disabilities were being appropriately served by the Project. To qualify as a placement under the contractual agreement between the HHD National Project Office and the Project PLANTWORK Area Office, the following criteria must be met:

(a) the worker must have a developmental disability;
(b) the worker must be placed into competitive employment or employed as a worker in a *continuing* program of community employment;
(c) the employer must pay minimum or above wages;
(d) the job position must be full-time, i.e. thirty-five (35) hours or more per week;
(e) the Area Office must provide either direct or assistive placement services. An assistive placement occurs when the Area Office networks with another agency/organization by referring either the worker or the job opening which results in employment and/or the Area Office provides the worker supportive services such as job coaching, assistance with resume writing, transportation coordination, etc., which facilitates the placement; and,
(f) the Area Office must submit a fully and accurately completed "60 Day Closure Report" documenting the placement. The HHD National Project Office reserves the right to contact the worker and/or the employer to verify job placement information.

In the event that a worker voluntarily or involuntarily leaves an employment situation after the placement has been accepted by the HHD National Project Office as meeting the HHD contractual requirements, the Area Office may receive credit for placing the worker into a new employment situation if the following criteria are met:

- a period of unemployment has elapsed between the jobs;
- the worker was placed into competitive employment;
- criteria (d) through (f) above are documented by the Area Office; and,
- no more than one (1) other accepted placement has been recorded for the same individual during the current contract period (i.e. only two (2) placements during a given contract period will be accepted).

Report Requirements

The HHD Area Office was required to forward to the HHD National Area Office Coordinator three items on a monthly basis:

- *Monthly Narrative Report*
  This report is written in the format of an informational letter detailing significant networking activity with industry and rehabilitation organizations, the number of persons placed during the month, meetings which have been held, new projects undertaken by the Area Office, and a schedule of planned activities for the upcoming month;

- *HHD-Year-to Date Job Placement Summary*
  This report is cumulative in nature and lists all placements made during a given contract period. Each month the Area Office makes copies of the previous month's report and adds information on newly placed workers. This procedure tracks successful closures and enables the HHD National Project Office to keep an accurate count of pending job placements and successful job closures.

- *60 Day Closure Report*
  This report is completed after sixty (60) days to verify the status of the employee with a developmental disability who has been placed. It relays the data useful for evaluating Project placement results; and, is utilized to request the Project PLANTWORK on-the-job training wage subsidy reimbursement for the employer.

Accountability for placement results is the essential component of any job development program. The monthly formats described above provided documentation, tracking, and performance control for Project PLANT-WORK placement efforts. Appendix C provides sample copies of these formats. Although quantitative results are emphasized in reporting, qualitative outcomes are also of concern. For example, since Project PLANT-WORK is viewed as an industry service program, placements made within the horticulture industry are preferred. This has been defined as job placements within horticulture and allied industries or horticulture related jobs within any other industry (e.g. ground maintenance at a fast food restaurant). Similarly although closures are made after 60 days on the job, stable on-going placements are emphasized and encouraged.

VIII. WAGE SUBSIDIES AS A MARKETING TOOL

An approach to facilitating employment of workers with developmental disabilities through dealing directly with employer cost and financial concerns, is the selective use of wage subsidies or supplements. A number of studies on the needs of workers with disabilities have suggested this approach. For example a comprehensive report to the Carnegie Council of Children notes: "Pilot programs should be launched in which employers are reimbursed for the additional risk they take when hiring certain groups of disabled workers; when designing these programs it is essential that a wide range of reimbursement schedules be explored so that rough estimates of the responsiveness of employers' hiring practices to increasing reimbursement levels can be explored. Furthermore, it is essential that reimbursement programs be designed in such a way that they do not inadvertently encourage an employer to fire newly hired disabled workers at the end of the subsidy period so that he can then lure a new group of subsidized workers to replace the ones just fired." (Gliedman, John and William Roth. "The Unexpected Minority—Handicapped Children In America", for the Carnegie Council on Children, Harcourt Brace Jovanovich, N.Y., 1980).

The "Report of the Comprehensive Service Needs Study" concludes: "Another way of stimulating demand is to make the severely handicapped less costly to employers by subsidizing some of their wages. Under such a program the Federal Government would pay the employer the difference between the value of the workers' product and the minimum wage rate or pay a fixed percentage for certain kinds of employed handicapped . . . A number of writers have urged the use of publicly financed employer subsidies." (The Urban Institute. "Report of the Comprehensive Service Needs Study", Washington, D.C., June 23, 1975).

A symposium sponsored by the Brookings Institution to review the economic value of employment subsidies for disadvantaged workers addressed their value. This provides a contemporary policy analysis of targeted private sector employment subsidies focusing on labor market problems of unskilled and semi-skilled workers confronting structural unemployment (as contrasted with public service employment and counter cyclical employment concerns). The volume reviews a number of critical aspects necessary to the use and application of wage subsidies. Included in this discussion is the review and evaluation of selected wage subsidy schemes in Europe. Data presented indicates that genuinely created new jobs as a fraction of total subsidized jobs range from fifteen percent (15%) to forty percent (40%). In the United States there has been experience with three employment subsidy programs in recent years. These include:

- *Work Incentive Tax Credits* (Revenue Act of 1971)—tax credits for WIN recipient employment up to 20% of first year wages later extended to AFDC families with 50% credit up to $6,000 for the first year of employment and 25% of wages up to $6,000 for the second year;

- *New Jobs Tax Credit* (Revenue Act of 1976)—temporary program during 1977 and 1978 offered firms tax credits equaling the minimum of 50% of the first $4,200 paid each new hire; and,

- *Targeted Jobs Tax Credit* (Revenue Act of 1978)—temporary program for 1979 and 1980, later extended through 1985 providing a tax credit of 50% of wages up to $6,000 in the first year and 25% of wages up to $6,000 in the second year (eligible group includes "handicapped persons undergoing vocational rehabilitation").

(Haveman, Robert H. and John L. Palmer ed.; "Jobs for Disadvantaged Workers: The Economics of Employment Subsidies", The Brookings Institution, Washington, D.C., 1982).

A variety of wage subsidy plans for workers with disabilities have been in use in Europe since the end of World War II. These have encountered a mixed record of success. (Reuben, Beatrice. "The Hard to Employ", Columbia University Press, N.Y., 1970). According to a more recent analysis of some 50 nations, incentives for employing persons with disabilities include 8 countries which reduce social security contributions, 10 countries which provide tax concessions, and 16 countries which offer grants for adaptation of the work place. In the Federal Republic of Germany employers meeting that country's quota of employees with disabilities may claim a subsidy of up

to $8,750 for each worker with a severe disability employed beyond the quota. In Great Britain, the Job Introduction Scheme enables businesses to employ persons who are disabled on a trial basis of up to six weeks at a subsidy of $30 per week. Japan offers "adjustment grants" of $70 per month for employing more than 300 employees with disabilities, a special monthly subsidy for employers hiring workers with severe disabilities of up to $500 per month to meet administrative and management costs, and a bounty of $750 per month per person for recruitment of full-time workers through public employment security offices. According to authors of this analysis: "A levy-subsidy approach recognizes the fact that handicapped persons can be an expensive proposition . . . Overall there is a strong case for the provision of subsidies and grants in employment policies to encourage the employment of disabled persons. In the end, it is often these incentives that will induce employers to hire the handicapped . . . The opinion in recent years has shifted in favor of subsidies and grants." (Kulkarni, Madlow. "Quota Systems and the Employment of the Handicapped—Experiences in Three Countries", University Center for International Rehabilitation, Michigan State University, East Lansing, Michigan, 1982).

Wage subsidy programs for workers with disabilities in the United States have been both limited and of small scope. One of the major sustained efforts has been the National Association for Retarded Citizens—On The Job Training Project. This has been operating since 1966, under the sponsorship of the U.S. Department of Labor. Several state agencies serving persons with disabilities, from time to time, have provided wage subsidies to employers hiring and training workers who are disabled. For example, such subsidies have been provided by the state vocational rehabilitation agencies. However, in general there has been no real demonstration of the use, application, and benefits of *direct wage subsidies* for workers with developmental disabilities in this country. Project PLANTWORK was designed to provide a selective demonstration for the use of wage subsidies utilizing the PWI process.

IX. PROJECT FINDINGS AND DEVELOPMENTS

Placement Results

Project PLANTWORK was directed at providing employment services to persons with developmental disabilities. As noted earlier, a developmental disability was defined as a severe chronic disability which is:

- attributable to a mental, physical or multiple impairment;
- manifested prior to the age of twenty-two;
- likely to continue indefinitely;
- resulting in substantial functional limitation in such major life activities as self-care; receptive and expressive language; learning; mobility; self-direction; capacity for independent living; economic sufficiency; and,
- requiring on-going coordinated services which are interdisciplinary or generic, individualized, and spanning a life-long or extended period.

It was expected that a majority of those individuals to be served by the Project would be diagnosed as having mental retardation. However, based upon the definition, an effort was to be made to recruit and serve persons with other types of developmental disabilities.

Project PLANTWORK facilitated the placement of seventy-two (72) individuals with developmental disabilities into full-time competitive employment within the horticulture and allied industries or within other industries in horticulture related jobs. As of this writing, sixty (60) day follow up reports were available for sixty-nine (69) of the individuals placed by the Project. Those reports were the basis for the following statistical summary of the participants served by the Project. As projected, the majority (86%) of persons placed by the project had mental retardation as their primary disability. Fifteen percent (15%) of workers placed had more than one disability. Table 1 details the types of disabilities of persons placed by the Project.

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Table 1
Types of Disabilities and Number Placed

Disability	*Primary*	*Percent*	*Secondary*	*Percent*
Retardation	59	(86)	2	(03)
Learning Disability	5	(07)	2	(03)
Emotional	2	(03)	1	(01)
Cerebral Palsy	1	(01)	–	
Hearing Loss	1	(01)	–	
Multiple Sclerosis	1	(01)	–	
Epilepsy	–		4	(06)
Head Trauma	–			(01)
Substance Abuse	–		1	(01)
Total	69	(100%)*	11	(15%)

* figure rounded

Regarding the severity of the disability, fifty percent (50%) were classified as mildly disabled and fifty percent (50%) were cited as being persons with moderate to severe disabilities. Similarly, one-half of the participants were certified by the state vocational rehabilitation agency and one-half were identified as being certifiable as eligible for services.

Eighty-four percent (84%) of persons placed by the Project were male and sixteen percent (16%) were female. Sixty percent (60%) were caucasian, while forty percent (40%) were negro; all project placements listed North American as ethnic origin. The age range of participants was eighteen (18) to forty-three (43). As shown in Table 2, the average age of workers placed was twenty-five.

Table 2
Age of Workers Placed

Age	*Number*	*Percent*
<20	7	(10)
20-25	33	(48)
26-30	19	(28)
31-35	7	(10)
>35	3	(04)
Total	69	(100%)

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Ninety-three percent (93%) of the participants attended special education classes. The other seven percent (7%) completed the twelfth grade but went no further with their education.

As Table 3 indicates, forty-two percent (42%) of Project participants were receiving Supplemental Security Income benefits at the time of placement, fourteen percent (14%) were supported by parents, and one fourth of participants had no known income source. The average benefit amount for those receiving SSI was $325 per month. The average income following employment for those who had been receiving SSI almost doubled to $649 per month.

Table 3

Primary Source of Income of Workers Prior to Placement

Source	*Number*	*Percent*
SSI	29	(42)
Parents	10	(14)
Public Welfare	4	(06)
Workers' Compensation	2	(03)
Part-time Employment	1	(01)
Social Security	1	(01)
Sheltered Workshop	4	(06)
None or Unknown	18	(26)
Total	69	(100%)*

* figure rounded

Hourly earnings at placement ranged from the statutory Federal minimum wage of $3.35 per hour to a high of $5.10 per hour. Forty-three percent (43%) of participants received minimum wage and sixty-seven percent (67%) received starting wages at above the minimum wage.

Table 4

Initial Earnings of Workers Placed

Hourly Wage	*Number*	*Percent*
3.35	29	(43)
3.36—3.99	15	(22)
4.00—4.50	20	(28)
4.51—4.99	0	(0)
5.00—5.10	5	(07)
Total	69	(100%)

All persons employed through Project PLANTWORK worked in horticulture or horticulture related jobs. Table 5 indicates the job titles of workers employed and Table 6 identifies the types of business operated by their employers.

Table 5
Job Titles of Workers Placed

Job Title	*Number*	*Percent*
Indoor/Outdoor Maintenance Worker	37	(54)
Greenskeeper	15	(22)
Grounds Maintenance Worker	5	(07)
Nursery/Greenhouse Worker	6	(09)
Landscape Laborer	5	(07)
Seed Packer	1	(01)
Total	69	(100%)

Table 6
Businesses Employing Workers Placed

Type of Business	*Number*	*Percent*
Recreational	22	(32)
• Golf Course	16	
• Country Club	1	
• Zoo	5	
Landscaping/Garden Center	12	(18)
Housing	11	(16)
• Hotel	8	
• Apartment	1	
• Nursing Home	2	
Retail	9	(13)
Manufacturing	7	(10)
Educational	3	(04)
Restaurant	3	(03)
Other	2	(03)
Total	69	(100%)

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A total of thirty-seven (37) businesses hired project participants. Twenty-four (24) or sixty-five percent (65%) hired one employee, seven (7) firms or nineteen percent (19%) hired two employees, three (3) firms hired three (3) employees, and three (3) firms hired five to twelve employees each.

Of the sixty-nine (69) persons for whom closure reports were available, fifty (50) or seventy-two percent (72%) retained employment after sixty (60) days. Approximately sixteen percent (16%) of participants were terminated and eleven percent (11%) quit voluntarily.

Employers of Project PLANTWORK participants readily used the wage subsidies available through the Project. Reimbursements totaling $24,102 were disbursed for training costs associated with fifty-five (55) employees at an average reimbursement rate of $438 per placement. Virtually all eligible employers of persons who were still employed after sixty (60) days participated in the wage subsidy program. Employers of participants who quit or were terminated before sixty (60) days but after one hundred (100) hours of employment were eligible to receive reimbursement. Six (6) of these employers requested reimbursement.

Table 7 charts the utilization by employers of the various incentive programs available to them. The Targeted Jobs Tax Credit (TJTC) was the second most popular incentive used by employers. Prior to its expiration on December 31, 1985, eleven (11) employers applied for TJTC. Six (6) employers participated in the National Association for Retarded Citizens—On the Job Training Project (ARC-OJT) and three (3) employers participated in a local county Private Industry Council—On the Job Training project (PIC-OJT).

Table 7
Utilization of Employer Incentives

	Employment Status After 60 Days			
Incentive	*Employed*	*Terminated*	*Quit*	*Total*
PLANTWORK OJT	49	4	2	55
ARC-OJT	3	–	3	6
PIC-OJT	3	–	–	3
TJTC	9	–	2	11

Without a follow-up survey of employers, it is difficult to positively conclude the impact of the wage subsidy program on the willingness of employers to consider workers with developmental disabilities. However, based upon the number of persons employed and the frequency of multiple

hires by individual employers, it appears that the availability of funds encouraged undecided employers to take a "risk" and hire the person in question. Furthermore, having encountered one or more successful hires, the employer was more likely to consider additional employees. Superintendents of the company hiring twelve persons for their golf course had the following comments regarding their new employees:

> "Some of the most productive workers I've had the pleasure of working with!"
>
> "It has been a challenge and a thrill working with the disabled and they are a great asset to the Golf Course industry!"
>
> "I'm not sure which of us learned more, but regardless the rewards are significant. It's refreshing to work with dedicated and eager personnel!"

This particular company has indicated that the HHD Delaware Valley Area Office would be notified of all future openings and would be given the first opportunity to fill such vacancies.

Personnel Assistance Program

One significant contribution of Project PLANTWORK was the development of a group placement Personnel Assistance Program. In September of 1985 a contact was made with a newly formed company that assumed the operation of six of the municipally owned golf courses located in the City of Philadelphia. This company was in need of developing several crews of golf course maintenance workers. A member of the HHD Delaware Valley Regional Horticulture Industry Council was part of the City of Philadelphia Transition Team that relinquished city management of the six golf courses to the private management company and provided Project PLANTWORK information about the opportunity.

The transfer of operations from the city government to private management presented a number of manpower problems for the City. Long time city employees would have to either be transferred to other city government positions, laid off, or rehired by the new management company. Many employees elected to be transferred to other city departments. In the process this left several job openings to be filled by recruiting new workers at each of the golf courses.

As a result of this opportunity a meeting was scheduled for October 1985 between the HHD Industry Job Specialist and the Director of Agronomy responsible for the management of the company's Delaware Valley regional golf courses. This preliminary meeting was designed to exchange information

about each others' organization and to explore the possibility of working together. At that meeting a decision was made to develop an agenda for a subsequent meeting to be held in November, 1985.

At this November, 1985 meeting the HHD Industry Job Specialist presented the strategy for a "Personnel Assistance Program". Key issues and items that were discussed at this meeting included: job analysis; salaries and salary surveys; equal employment and affirmative action requirements; technical assistance for training supervisors of the new trainees; and employer incentives (including HHD wage subsidies, on-the-job training assistance, and Targeted Jobs Tax Credits).

Information was obtained regarding work site locations; public transportation to work sites; hiring schedules; recruitment and interviewing needs; employee selection criteria; and orientation and support services for new employees. Shortly after this meeting a thorough review was made of job descriptions and available employee manuals. Utilizing job analysis data and experience in similar analyses a theoretical job analysis was prepared by the HHD Industry Job Specialist. Site visits were conducted to assess working conditions at each work location, and an early February 1986 meeting was scheduled to begin implementing hiring plans.

Based on earlier work and the job analysis a more detailed discussion was held in February, 1986 to cover issues such as wage determinations; benefits; performance appraisals; salary reviews; HHD wage subsidies; and Targeted Jobs Tax Credits. These discussions resulted in the following conclusions regarding major items:

- An entry wage of $4.00—$4.50 per hour (depending on experience), was set utilizing information previously gathered through market salary surveys and U.S. Department of Labor statistics;
- Company benefits including health and medical insurance, workers' compensation, sick leave, vacation benefits and promotion policies would be available to the "new employees" on the same schedule as current company employees; and,
- A salary/performance review system was developed that provided for an employee review during the first 90-100 days of employment; a maximum incremental salary increase of eight percent (8%); and, an annual salary/performance review on the "new employee's" anniversary date.

Further discussion centered around the HHD wage subsidy and the Targeted Jobs Tax Credit Program. A major factor in the job development process was the demonstration that significant wage savings would result

from use of these programs. Savings were shown to have a real impact on the increased profits of this newly formed company in its first year of operation. Based on the progress made in the initial planning meetings the next phase of the plan called for recruitment, screening and selection. This phase included the recruitment, screening and selection of agencies serving persons with developmental disabilities. It also included the processing of individual applicants. Since a demand for workers with disabilities was created, it was now necessary to assure the supply of qualified workers with disabilities.

Organizing Referring Agencies

Securing the commitment of agencies providing services to unemployed persons with developmental disabilities in the Philadelphia area was critical. To secure that commitment a meeting was scheduled and twenty-eight (28) agencies were invited to attend an information briefing on Project PLANTWORK, to discuss the employment possibilities in the horticulture industry. The meeting was held at ARC/RAINBOW (the sponsoring agency for Project PLANTWORK) and was attended by seventeen (17) representatives from area agencies. This networking process was essential to assure a sufficient pool of job candidates.

Subsequently a memorandum was circulated to participating agencies outlining the minimal requirements for employment, application forms, the basic schedule for implementation of the screening program and a deadline for receiving applications. As a result Project PLANTWORK received thirty-five (35) applications containing client referrals. Eighteen (18) applications were selected and an HHD interview schedule for selected clients was developed. All applicants were notified in writing of their interview location, date, and time, and were provided directions to the interview site.

Applicant Screening Interviews

The screening interview process was designed to gather as much relevant information as possible. However it was found that due to the number of interviews scheduled, detailed information would be difficult to obtain in the short time span allowed for each interview. It was decided to contact the referring agencies to obtain pertinent information regarding work skills, work habits, social history etc. from agency records. This information was developed in a telephone interview with each applicants' caseworker or case manager.

During the actual screening interview by the HHD Industry Job Specialist a member of the Project PLANTWORK staff was invited to sit in to

observe and take notes during the interview session. Caseworkers/employment specialists were also encouraged to observe the interview process so that they could work with their clients who needed improvement in the interview process. The interview style was a planned or action interview that utilized open-ended questions designed to relax and encourage the applicant to speak freely about their home life, employment views, previous work experience, attitudes and recreational interests. The interviewer selected this particular style of interview because it utilizes the person's past as an index for clues to their future success. This interviewing technique enables the interviewer to make tentative inferences from certain disclosures and identify evidence in other facets of the person's life to substantiate this impression. If the inference cannot be verified by other facts, it is then rejected.

Upon conclusion of the interview it was quite evident that there were marked differences in preparation of job-ready clients by the various agencies providing referrals. During the course of the interviews it was apparent which agencies were most successful in assisting their clients in preparing for the interview. Well-prepared clients provided the interviewer with a written resume, were dressed appropriately, were attentive, demonstrated proper posture and eye contact, were confident and well prepared to discuss themselves and their abilities. Other agencies' employment preparation of their clients were either very poor or not apparent. As a result a majority of the well prepared applicants were selected as final candidates. **It was clearly evident that job preparation is a critical factor in securing employment for people with developmental disabilities and therefore major emphasis should be placed on teaching job seeking skills.**

After the initial discussion about job preparation, the HHD Industry Job Specialist and the Project PLANTWORK staff met to rate each applicant on a consensus basis and assigned them to a work site within a geographic area closest to their residence. Transportation routes were identified and transportation schedules were verified with the mass transit authority to coincide with the early morning starting time of 6:30 AM at the work sites. This process was done in advance so that pending the employer's final interview each pre-screened applicant could be provided detailed information about their potential work site.

Familiarization and Safety Seminar

The next phase of the plan was to develop an equipment familiarization and safety seminar for the twelve (12) selected applicants. The seminar was designed to further assess the ability levels of successful applicants and to

utilize their performance as another screening tool. The seminar also provided the applicants with more job information. Up until this time the employer was not involved in the recruitment process. During the familiarization session the applicant could potentially obtain job information that might be useful in their final interview with the employer.

However, this particular element of the plan was not fully instituted due to unanticipated employee demands, caused by the mild late winter weather that brought golfers to the courses earlier than expected. An alternate plan was developed that included a phase-in period for workers with developmental disabilities and on-the-job orientation and safety program conducted by the new employees' direct supervisor. Orientation on the job with a gradual phase-in has proven to be more realistic because:

- supervisors were able to spend time one-on-one with the new employee in orientation and training, and,
- it eliminated the possibility of other non-disabled employees viewing the new employees with developmental disabilities as a different or special group receiving special treatment.

The use of this program provided twelve (12) persons with developmental disabilities employment. Ten (10) of the original twelve (12) remain on the job as of this writing and plans are now being formulated to develop more positions to employ persons with developmental disabilities.

This approach to job development and placement holds considerable promise for rehabilitation agencies both large and small. The program can be developed to market the existing components of a job development and placement program of the rehabilitation agency to employers who are experiencing high turnover rates or who are expanding their operations. Project PLANTWORK's original approach was to package its capabilities and experience in a manner that would provide the employer with a menu of services from which to select. This system, with refinements and modifications, could also be adapted to a "fee for service" arrangement with employers.

It is important to note that commercial for profit employment services often compete with rehabilitation for the same jobs and are paid for their successful efforts. Rehabilitation agencies are often better equipped to provide a wider range of *employment related* services as well as "service after the sale" and if their programs were developed and marketed based upon the commercial model greater numbers of placements might occur. Improved placements of persons with developmental disabilities are not the only positive outcomes fostered by this system. Benefits to the rehabilitation program include:

- exposure to industries that offer significant employment opportunities in larger numbers;
- opportunities to develop mutually beneficial business relationships between rehabilitation and industry;
- opportunities to sustain contacts with industry for subsequent employee recruitment needs;
- influence on the structuring of job descriptions, wages and benefit programs; and,
- the opportunity for income generation.

This arrangement also offers a number of benefits for employers including:

- a single contact point with the referring rehabilitation community;
- a better way to meet EEO and Affirmative Action requirements; and,
- considerable savings in recruitment and training costs.

The HHD program has recognized the potential of the Personnel Assistance program and has incorporated it into its overall industry service program. The program offers the following services:

- Job Analysis;
- Job Accommodation;
- Salary/Wage Surveys;
- Equal Employment Opportunity/Affirmative Action Consultation;
- Recruitment;
- Screening;
- Interviewing;
- Employee Selection;
- Supervisor Orientation;
- Incentives Assistance;
- Development of new employee orientation programs; and,
- Development of new employee support service systems.

The basic philosophy underlying this array of services, is the provision of an employer service program. In the process HHD acts as an agent or advocate for the employer. Through networking the referral of clients, utilization of the screening process as a client educational or development program, and through employer servicing, the proper match of employer and employee is possible. Project PLANTWORK has demonstrated that under the proper circumstances screening and placement of groups of job applicants with developmental disabilities can be facilitated and enhanced.

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X. EPILOGUE

Project PLANTWORK is just one of the discretionary projects funded by the U.S. Department of Health and Human Services, Office of Human Development Services, Administration on Developmental Disabilities. It was one of the first national projects supported by the Department as a part of the Administration on Developmental Disabilities, Employment Initiative Campaign. The initiative had its genesis some three years ago on November 28, 1983. At that time, President Ronald Reagan proclaimed the period of 1983 through 1992 as the National Decade of Disabled Persons. This formally established a national goal of increasing the economic independence of every disabled American.

The U.S. Department of Health and Human Services was directed to take a lead role in strengthening private sector job opportunities for persons with severe disabilities. A national campaign to coordinate and stimulate employment development efforts on behalf of persons with developmental disabilities ensued. The Department reports that as a result of this effort more than 82,000 persons with developmental disabilities have been placed in competitive jobs from November, 1983 through April, 1986.

The initial approach to private sector employers was via an informational letter and pledge card sent to 120,000 employers throughout the country. Some 1,200 respondents indicated their interest by filling out a request card asking for more details. Responses received in the summer of 1984 indicated that the category of businesses seeking information consisted primarily of restaurants, horticulture firms, and hotels and motels. This reflects the high demand for entry level workers in many service occupations which has occurred in recent years.

The Employment Initiative Campaign has taken a proactive and multi-faceted approach to expanding job opportunities for the more than 3.9

million Americans with developmental disabilities. One significant accomplishment has been the broadened level of awareness and commitment within the business community. The National Council for Therapy and Rehabilitation through Horticulture, along with the National Restaurant Association, American Hospital Association and Naugles, Inc. was awarded a citation and recognized at an Oval Office ceremony at the White House during November, 1984. Since that time, many other major corporations, trade associations and businesses have made employment commitments or expressed interest in the Campaign.

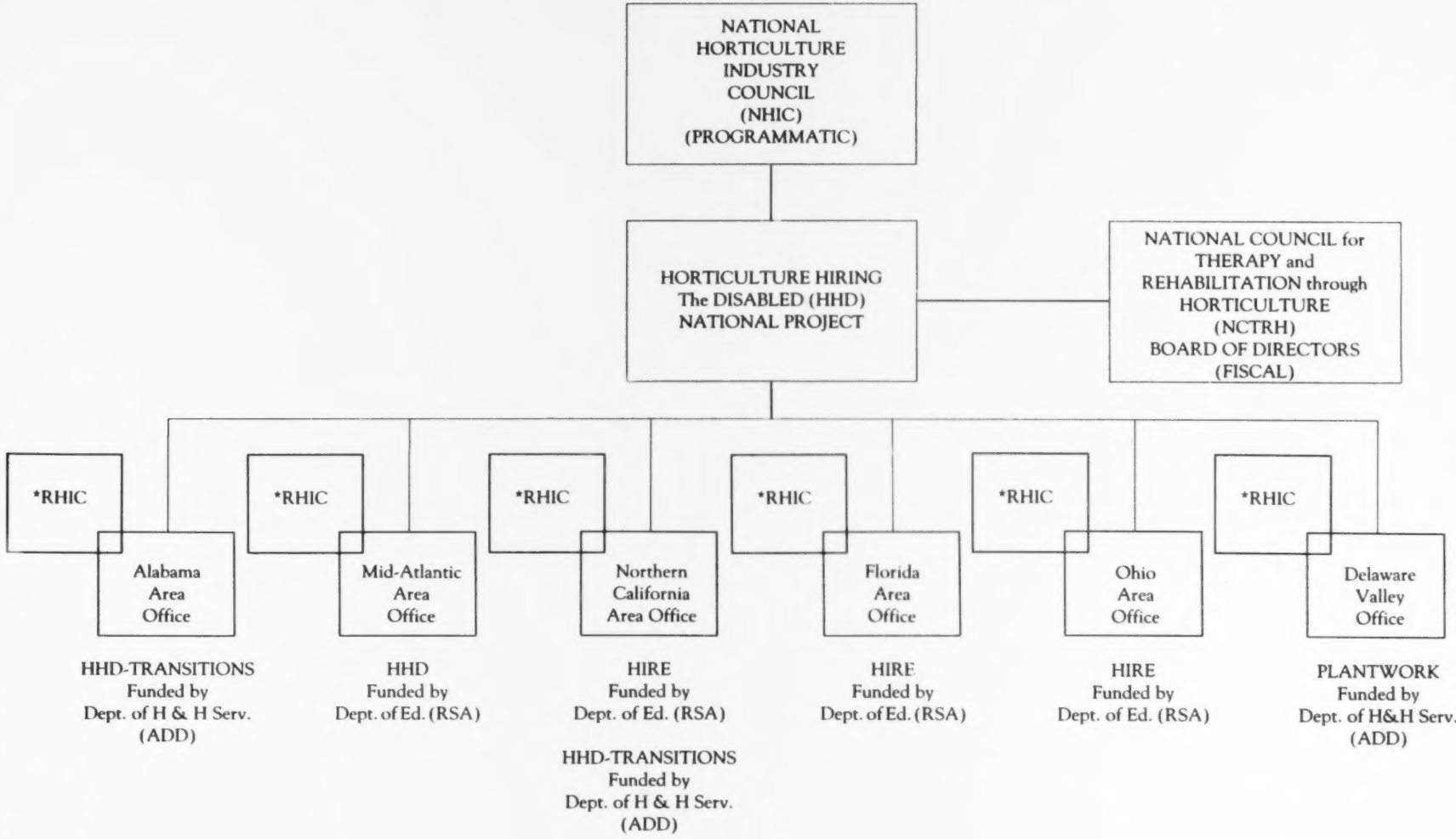
The Administration on Developmental Disabilities has earmarked discretionary funds for public and private programs designed to improve or expand the quantity and quality of employment-related services. With the revision of the Developmental Disabilities Act in 1984, each State Developmental Disabilities Council is also now mandated to provide employment-related services. Most councils are currently actively implementing this mandate. Efforts have included projects jointly funded with the U.S. Department of Education to promote supported employment projects in ten states; job match and job information networks; employee assistance projects, and youth transition projects.

Projects to address the transition needs of students with developmental disabilities who are leaving the public school system have received increasing attention. The Youth 2000 Initiative of the U.S. Department of Health and Human Services is expected to further reinforce and compliment research and demonstrations on the school to work transition. As a part of its' ongoing interest, involvement and commitment, NCTRH is presently operating a youth transition program under the auspices of a three-year grant from the Administration on Developmental Disabilities. HHD-TRANSITIONS has established two demonstration sites at Goodwill Industries of Mobile Area, Mobile, Alabama and Rehabilitation Services of Northern California, Concord, California. This project will utilize an industry-based adaptation of the Projects With Industry model to facilitate placement of transitioning youth with developmental disabilities from school to work.

Through its various ongoing employment projects, NCTRH is demonstrating the viability of hiring persons with developmental disabilities within the horticulture industry workforce. Ongoing promotions and educational efforts will be required in the future to sensitize greater numbers of horticulture employers to the human resource approach. It is hoped that this publication will significantly contribute to this effort.

APPENDICES

HHD ORGANIZATIONAL CHART


NATIONAL HORTICULTURE INDUSTRY COUNCIL (NHIC) (PROGRAMMATIC)
HORTICULTURE HIRING The DISABLED (HHD) NATIONAL PROJECT
NATIONAL COUNCIL for THERAPY and REHABILITATION through HORTICULTURE (NCTRH) BOARD OF DIRECTORS (FISCAL)
*RHIC
Alabama Area Office
HHD-TRANSITIONS Funded by Dept. of H & H Serv. (ADD)
*RHIC
Mid-Atlantic Area Office
HHD Funded by Dept. of Ed. (RSA)
*RHIC
Northern California Area Office
HIRE Funded by Dept. of Ed. (RSA)
HHD-TRANSITIONS Funded by Dept. of H & H Serv. (ADD)
*RHIC
Florida Area Office
HIRE Funded by Dept. of Ed. (RSA)
*RHIC
Ohio Area Office
HIRE Funded by Dept. of Ed. (RSA)
*RHIC
Delaware Valley Office
PLANTWORK Funded by Dept. of H&H Serv. (ADD)

*Regional Horticulture Industry Council

HORTICULTURE HIRING THE DISABLED AREA OFFICES

ALABAMA AREA OFFICE
HHD-TRANSITIONS

Goodwill Industries of Mobile Area, Inc.
2448 Gordon Smith Drive
Mobile, AL 36617
(205) 471-1581

DELAWARE VALLEY AREA OFFICE
Project PLANTWORK

ARC/RAINBOW
2350 West Westmoreland Street
Philadelphia, PA 19140
(215) 229-6859

FLORIDA AREA OFFICE
Project "HIRE"

Florida Alliance for Employment
of the Handicapped, Inc.
2590 Executive Center East, Suite 209
Tallahassee, FL 32301
(904) 487-2222

MID-ATLANTIC AREA OFFICE
HHD

Melwood Horiticulture Training
Center, Inc.
5606 Dower House Road
Upper Marlboro, MD 20772
(301) 599-8000

NORTHERN CALIFORNIA
(BAY AREA) OFFICE
Project "HIRE" and HHD-TRANSITIONS

Rehabilitation Services of Northern California
Mt. Diablo Rehabilitation Center
490 Golf Club Road
Pleasant Hill, CA 94523
(415) 682-6330

OHIO AREA OFFICE
Project "HIRE"

c/o National HHD
9220 Wightman Road
Suite 300
Gaitherburg, MD 20879
(301) 948-3010

ANNOTATED BIBLIOGRAPHY: PROJECTS WITH INDUSTRY*

Brickey, M.; Browning L.; and Campbell, K.; "Vocational Histories of Sheltered Work Shop Employees Placed In Projects With Industry and Competitive Jobs", *Mental Retardation*, Vol. 20, No. 2, 1982, p. 52-57.

Job placement histories of 73 sheltered workshop employees placed in Projects With Industry (PWI) on competitive jobs in calendar year 1978 are examined during a 30 month period. Of the 27 people placed in PWI positions, 48% were subsequently placed in competitive jobs. Of the 53 competitive placements in 1978, 60% were competitively employed by 7/1/80. Job variables such as structure appear to be more important to job success than employer demographic variables such as I.Q. Two alternatives to individual job placement are discussed.

Burger, G.; *Program Models for Projects With Industry*, Rul No. 9, Jewish Vocation Service Research Utilization Laboratory, IL, 1978.

Manual identifying different models of Project With Industry (PWI) with procedures to implement them and to help administrators choose compatible models and to devise step by step procedures to establish a PWI. PWI, initially funded by the Rehabilitation Services (RSA) DHEW DC in 1970, links the employer directly with the disabled worker. Survey results showed three approaches to a PWI model: 1) job placement model seeking immediate, permanent, full time competitive employment for disabled workers ready to work; 2) work adjustment model which provides time limited work experience for clients to develop skills and other qualities to qualify for work; 3) skills training model which teaches technical skills needed to seek higher paying employment. Also described are working

models of each type, such as Jewish Vocational Service PWI, Fountain House PWI, IBM Corporation PWI and linkage model of Electronic Industry Foundation. Appendices include description of seven other PWI models and a list of 1977-1978 PWI's.

Chicago Jewish Vocational Service Research Utilization Laboratory. *Chicago Jewish Vocational Service: Final Report: 1974-1978*, Chicago Jewish Vocational Service Research Utilization Laboratory, IL, 1980.

Describes the Research Utilization Laboratory (RUL) Project's six studies and the evaluations of each study. They are 1) use of the Minnesota Importance Questionnaire to determine the meaning of work to clients; 2) goal attainment scaling as an accountability tool; 3) cooperation between agencies to serve severely disabled clients; 4) job development and placement; 5) site visit method of dissemination; and 6) models for projects with industries. Includes tables.

Decelles, P.G., and Hester, E.J.; *Study of Goodwill PWI Clients: Demographic Variables Related to Client Placement Outcome*, Menninger Foundation Vocational Rehabilitation Research and Training Center, KS, 1985.

Presents an analysis of 1423 clients served by the Goodwill Projects With Industry (PWI) during the fiscal year 1983. Correlates placement success to demographic variables such as history, sex, age, race, public income source, family status and dependents, work history and education level, and program level. Describes a summary scale of client characteristics. Includes figures, tables, client information form and references.

Department of Education Rehabilitation Services Administration. "Projects With Industry at Vocational Guidance and Rehabilitation Services in Ohio", *American Rehabilitation*, Vol 10, No. 1, Jan-Feb-Mar 1984, p. 1922.

Discusses Vocational Guidance and Rehabilitation Services (VGRS) Project to assist disabled persons to develop a work history in a real work setting. VGRS basic concept involves a host site which provides a number of job slots. These job slots are filled with prescreened disabled persons. A VGRS Vocational rehabilitation counselor is housed at each host site to work with company managers and counseling to assist clients adjustment. Article discusses benefits to the host company and disabled person as well as the host company and disabled person as well as the success of this project in Ohio. VGRS has instructed a number of other state agencies in developing similar PWI's in Ohio. VGRS was one of the first three agencies nationwide to be selected in 1970 as a PWI funded then by the

Department of Health, Education and Welfare. Several PWI programs operated by VGRS in Ohio are discussed, also statistics on number of VGRS placements 1978-82 and future implications for PWI's.

DeSimone, A.; "Industry's Commitment to VR", *Social and Rehabilitation Record*, Vol. 1, No. 5, 1974, p. 23-27.

A discussion of the Projects With Industry approach to implementation of social policy. Describes model programs developed by Fountain House, a New York City psychiatric rehabilitation center, and by the Human Resources Center of Albertson, Long Island, New York.

Dunlap, C., and Moretti, V.; "Access To Employment: The SLD Person at Work", *ACLD Newsletter*, Vol. 150, MayJune 1983, p. 4.

Goals and characteristics of Electronics Industries Foundation's Project With Industry are discussed with emphasis on the project's support for using existing vocational rehabilitation programs and services to serve learning disabled persons.

Fleming, T.J.; *Project With Industry: A Program to Facilitate Placement of Handicapped Individuals Within Electronic Industries Nationwide: Annual Report Mar 1977-Feb 1978*, Electronic Industries Foundation, Washington, D.C., 1978.

Describes the first year of a federally-funded project developed to organize joint industry-rehabilitation panels in Los Angeles and San Francisco to help place disabled workers in skilled jobs within the electronics industry. Discusses the background of the project, the function of the National Advisory Council, the organization of the panels in the two pilot cities and the procedures used to identify, recruit and place disabled workers. Includes miscellaneous attachments that relate to the project, photographs, tables and forms.

Fountain, B.R.; *Evaluation of Projects With Industry Program: Final Report*, Urban Resources Consultants, Washington, D.C., 1978.

Study to evaluate 15 Projects With Industry (PWI) which provided vocational training and placement for handicapped people, authorized by Section 304 (d) of the Rehabilitation Act of 1973. Intended to determine whether and to what extent the PWI's were following their legislative

mandate, and to develop an evaluation system for future assessment of the program's effectiveness. Discusses the evaluation instruments, data collection process, field testing and final instrument called the System for Evaluating Projects With Industry (SEPWI). Includes tables, charts and sample forms. Also provides demographic data of clients enrolled in PWI.

Geletka, J.R.; "Electronics, A Creative Solution", *Mainstream*, Vol. 7, No. 12, October 1982, p. 30-31.

Describes the Electronic Industries Foundation (EIF) Projects With Industry (PWI) program, which attempts to make industry the primary element in placement of disabled persons, thus improving employment opportunity. Examines organizational structure of the six EIF PWI programs, describing the Executive Advisory Board of private sector and rehabilitation agency personnel, and Employment Committee to focus on hiring, the Executive Committee on Training which develops and maintains training sources in the community, and area staff responsible for placement through marketing. The marketing model utilizes concepts of production orientation, sales orientation, and consumer orientation to identify the personnel needs of industry, the capabilities of clients, and promote hiring qualified disabled persons. Includes addresses of each EIF PWI program and national headquarters, as well as photographs.

Hadley, F.P.; *Projects With Industry: Manual of Operations*, Goodwill Industries of America, D.C., 1978.

Describes ways to implement a Projects With Industry program to place disabled individuals in competitive employment. Discusses executive considerations, occupational outlook and skill demand surveys form, client availability, selection of skill training areas, development of an advisory committee, the loaned executive program which uses experienced managers from community employers, project implementation, client follow-up, and grant or contract administration.

Hester, E.J., and Stone, E.; *Preventing Disability Dependence: Utilization of Worksite Modification*, Menninger Foundation Vocational Rehabilitation Research and Training Center, KS, 1984.

Study involves survey of Projects With Industry (PWI) to determine the extent to which worksite modification is utilized to enable disabled workers to return to productive employment. Discusses quality and quantity of worksite modification usage, agency characteristics and employer

reactions. Compares data from users and nonusers to help predict which agencies would benefit from worksite modification. Includes tables, bibliography, copy of questionnaire used, list of participating agencies and training programs.

Jonas, J.F.; Leslie, J.H.; and Norris, R.H.; *Modifying the Worksite to Enhance Employability: Final Report: Annual Report*, Feb 1, 1984-Jan 31, 1985, Wichita State University and Cerebral Palsy Research Foundation of Kansas Rehabilitation Engineering Center, KS, 1985.

Summary of 13 projects of the Wichita Rehabilitation Engineering Center (REC) related to standards and assessment indicators for the worksite, worksite modification to enhance employability, and independent living skills to enhance employability. Presents an overview of the Center and describes key personnel, methodology, recommendations and research utilization plans for each project summary. Populations used for the studies include neurologically impaired individuals and pre-vocational disabled individuals ages 12-20. Topics include job-related performance characteristics, use of a robotic arm in the workplace, keyboard designs and use of head, mouth and hand sticks, audiobiofeedback, projects with industry, use of vocational rehabilitation engineering in sheltered workshops and assistive device prescriptions to aid in the development of independent living skills. Includes figures, tables and references.

Kaplan, I., and Hammond, N.; "Projects With Industry: The Concept and the Realization", *American Rehabilitation*, Nov-Dec 1982, p. 3-7.

Discusses problems in rehabilitation of clients for reemployment in competitive positions and the formulation of Projects With Industry (PWI) programs to alleviate the problems. Describes the Job Placement Model, Work Adjustment Model, Skills Training Model, and an early PWI prototype developed at the IBM Corporation. Discusses common characteristics shared by the PWI projects and guidelines for initiating PWI programs with other private sector employers.

Liebert, D.E.; *Factors Related To Short And Long Term Employment Outcomes for Handicapped Participants in an Industry-Based Rehabilitation Program: Final Report: Mary E. Switzer Fellowship Report*, National Institute of Handicapped Research Mary E. Switzer Fellowship, Washington, D.C., 1984.

Study to determine whether an industry-based rehabilitation model achieves its goal of competitive employment for disabled participants (mentally retarded, learning disabled or "other"—largely physically, visually or hearing disabled) and whether the type of disability is related to employment outcomes; to determine if a program of continuous assistance is related to long-term employment success; and to find the factors contributing to successful employment for disabled adults who participate in the industry-based rehabilitation program along with determining the best predictors of employment success for individuals with different disabling conditions. The study was conducted in cooperation with the Board of Cooperative Educational Services (BOCES) of Nassau County, New York, Project With Industry.

Magee, J.T.; Fleming, T.J.; and Geletka, J.R.; "New Wave in Rehabilitation: Projects With Industry", *American Rehabilitation*, Vol. 7, No. 4, Mar-Apr 1982, p. 20-24.

Discusses the role of the Projects With Industry (PWI) program in employment of disabled persons. More than 5,000 corporations and businesses are now affiliated with approximately 100 PWI projects. PWI offers a functional approach by tailoring services to specific needs of business and industry who design training, set the qualification standard for workers, and manage or modify the work area. Services of the PWI projects vary, but they have common ties, including the goal of competitive employment of business and industry in a senior management and leadership role. Includes description and photographs of a reception at the White House for the 1000th placement by the Electronic Industries Foundation's (EIF) Project With Industry program. Bibliography included.

Markowicz, A.; "Moving Disabled People Into the Work Force", *NAB Clearinghouse Quarterly*, Vol. 1, No. 4, Winter 1985: National Alliance of Business, D.C., 1984.

Collection of 11 National Alliance of Business (NAB) Clearinghouse Bulletins related to disabled persons and work. Each Bulletin summarizes a specific program in terms of funding, time span, results, and purpose. Additional information is provided on such topics as the background, staff and facilities, recruitment, intake, marketing, placement, follow-up, progress, hints for success, publications and contact. The programs cited are in Washington, D.C.; Illinois, Kentucky, Maine, Florida, New York, Massachusetts, Minnesota and Washington.

McMillion, E.H., and Rice, B.D.; *Projects With Industry: A Public/Private Partnership That Works: Tenth Institute on Rehabilitation Issues*, St. Louis, MO, May 31-June 2, 1983, University of Arkansas Vocational Rehabilitation Research and Training Center, AR, 1983.

Defines Projects With Industry (PWI) and provides a historical profile. Examines the legal framework for partnerships, private sector leadership, corporate expectations with examples of partnership models, leadership from the private sector, diverse PWI approaches and factors significant in establishing new projects. Explores funding strategies and resources. Provides guidelines for using this resources guide for staff training. Includes tables, a figure, a 1983 list of PWI projects and references.

National Association of Rehabilitation Facilities. *National Directory of RSA Funded PWIs*, National Association of Rehabilitation Facilities, Washington, D.C., 1984.

National Directory of Rehabilitation Services Administration funded Projects With Industry. Presents descriptions of projects written for business representatives and service providers. Briefly describes four models of service delivery: job placement, work adjustment, skills training and linkage models. The projects described include ongoing projects and those in the early stages of development. Provides project title, address, contact person, funding source, referral sources, project design, services, advisory council, business participants, structure, and special features.

National Association of Rehabilitation Facilities. *Projects With Industry: Rehabilitation—Industry Advisory Council*, Washington, D.C., 1983.

Discusses the rationale for and tasks of advisory councils to projects related to the administration of the Rehabilitation Act of 1973 as amended, particularly of the Rehabilitation-Industry Advisory Councils for the Projects With Industry. Describes recruitment, maintaining momentum and involvement, targeting jobs and training people to fill them, market forecasting, linkages and evaluating projects. Appendix includes planning sheet, meeting evaluation sheet, and a list of RSA funded Projects with Industry for the 1983 project year.

National Association of Rehabilitation Facilities. *Projects with Industry Training Manual: National Association of Rehabilitation Facilities*, Washington, D.C., 1980.

Overview of the developments leading to the formation of Projects With Industry (PWI) as a service delivery model. Covers information on the legislation that authorized the development of cooperative agreements with profit-making organizations and benefits to industry, client, facility and agency. Discusses program scope, local program development, local program operations, funding resources, legal information and technical resources.

National Association of Rehabilitation Facilities. *Projects With Industry Training Manual: National Association of Rehabilitation Facilities: 1981 Revised*, Washington, D.C., 1981.

An overview of the Projects With Industry (PWI) service delivery model. Includes an introduction, program scope, local program development, local program operations, funding resources, legal information and technical resources. Appendices list NARF sponsored state chapter PWI's and RSA funded PWI's.

National Association of Rehabilitation Facilities. *Supported Work Approach: Employer-Based Rehabilitation Facilities Services*, Washington, D.C., 1984.

Report on the Projects With Industry Program (PWI). Contracts or cooperative arrangements with industry and rehabilitation facilities are created through PWI programs to facilitate the training and placement of severely handicapped persons in the competitive labor market. Outlines employer and client needs and benefits and discusses strategies for assessing the labor market and building employer-supported rehabilitation and work programs. Includes annotated bibliography. Appendices include sample forms used in various training programs, including work productivity, job analysis, model placement plan, and model labor market survey.

Nelan, A.P.; "Sampling of Placements in the Food Service Industry", *American Rehabilitation*, Oct-Nov-Dec 1983, p. 3-6.

Presents a survey conducted by the National Restaurant Association's Projects With Industry Program to identify the number of people with disabilities who were placed in competitive employment in the food service industry during the twelve months before July 1, 1983. Presents the responses of vocational rehabilitation services, agencies, and training facilities nationally. Identifies specific large chains that have demonstrated

a growing awareness of and openness to the potentials of disabled people. Includes 1 table.

Nelan, A.P.; "Staffing Food Service Operations", *American Rehabilitation*, Apr-May-June 1983, p. 16-20.

Describes a Project With Industry program conducted by the National Restaurant Association to demonstrate to the food service industry the benefits of employing qualified people with disabilities. Discusses the involvement of state restaurant associations and local chapters, state vocational rehabilitation services, hundreds of facilities, and other organizations involved with disabled people. Describes ten model operations, including retail restaurants and bakeries, that are staffed by people with mentally, emotionally, and/or physically disabling conditions. Lists the names and addresses of these and similar programs.

Pati, G. C., and Morrison, G.; "Enabling the Disabled", *Harvard Business Review*, Vol 60, No. 4, Jul-Aug 1982, p. 152-155, 158-159.

Discusses the needs of disabled people in the area of employment, particularly in reference to the obligation of employers to make reasonable accommodations to meet their handicapped employees' needs. Describes how clear job descriptions and practical adjustments have made rehabilitation and hiring programs work in some companies. Offers guidelines for companies that are developing such programs. Describes a type of partnership called Projects With Industry (PWI), in which private industries and rehabilitation agencies cooperatively administer projects to help handicapped people adjust their attitudes and behavior to work requirements, train them in the skills they need, and place them in appropriate jobs. Includes 9 references.

Pati, G.C., and Adkins, J.L.; *Managing and Employing the Handicapped: The Untapped Potential*, Lake Forest, Illinois: Brace-Park, 1981.

Based on the thesis that disabled people constitute an underutilized human resource of great value, and intended to persuade employers, rehabilitation professionals and other interested parties that employing qualified disabled workers can help solve personnel and production problems. Describes the nature of the disabled population including demographics, myths and disabled people as political force; the legal framework and the human resource system including affirmative action programs, compliance and court cases; rehabilitation services and employment, including work sampling and projects with industry; recruitment and placement, including

employer concerns, job analysis and accommodations; descriptions of thirteen successful employment programs; technological support systems; logistics and accessibility, including standards, transportation and an architectural accessibility checklist; training and development, including supervisory roles and attitude improvement; and implications for future action. Appendices include legal information, a directory of organizations, and information sources. Indexed.

Pretz, D.S.; Daggett, S.R.; and Koren, P.E.; *Projects With Industry: An Assessment of Effectiveness: Studies in Placement Monograph No 8*, Portland State University Regional Rehabilitation Research Institute, OR, 1982.

Describes survey of four groups involved with the Projects with Industry Program (PWI) particularly the job placement services. Includes recommendations to improve cooperation between vocational rehabilitation agencies and PWI. Compares attitudes towards VR services received in clients who had been referred to PWI and those who had not.

PSI International. "Projects With Industry—Training For Partnership", *REHAB BRIEF*, Vol III, No 8, August 1985.

Discusses Projects With Industry including an historical prospective, legal framework for partnership, corporate expectations, leadership from the private sector, approaches to partnership and funding philosophy.

Reisner, E.R.; Haywood, B.J.; and Hastings, A.H.; *Assessment of the Projects With Industry Program*, Policy Studies Associates, Washington, D.C. and Advanced Technology, VA, 1983.

Study to find the characteristics of current Projects with Industry (PWI) projects such as funding levels, services provided, types of clients served and effectiveness in meeting program goals, and which projects types are most effective in achieving PWI program goals, and the relative effectiveness and replicability of projects operated by national trade associations. Research topics include types of performance measures, factors in shaping performance, operation of PWI's by state rehabilitation agencies, and types of organizations operating PWIs. Includes recommendations, findings, conclusions and descriptions of the PWI projects visited. Research sponsored by the Department of Education Planning and Evaluation Service.

Richardson, N.R., and Hill, J.; "Evaluation of Vocational Placement Success at a Comprehensive Rehabilitation Center: A Third Measurement", *Rehabilitation Literature*, Vol. 41, No. 1-2, Jan-Feb, 1980, p. 19-22.

Evaluates the success of a vocational placement program at a comprehensive rehabilitation center. The study replicated an earlier study designed to assess the employment success of the rehabilitants as measured by employment status at the time of interview and percentage of time employed since first job placement. Certain personal and program data were gathered on each client to try to elucidate those client and/or rehabilitation center factors that may have affected a person's success. Includes 3 tables.

Richman, C.; "Horticulture: Hiring The Disabled", *American Rehabilitation*, Jan-Feb-Mar, 1983, p. 20-23.

Discusses the potential employment opportunities in horticulture for disabled or handicapped workers. Describes the Projects With Industry approach for placing disabled workers into horticulture work. Provides background on horticulture therapy and describes aspects of the horticultural products and services industry as they relate to the employment of disabled workers. Describes existing job opportunities including groundskeepers, arborists, orchard and vineyard workers, floral designers, salespeople, nursery workers, and transport and equipment operators. Includes 7 references.

Trela, J.E.; Boswell, W.; and Mather, R.; *Projects With Industry: From Social Responsibility To Mutual Interest*, Vocational Guidance and Rehabilitation Services, OH, 1978.

Describes the Projects With Industry (PWI) approach which involves merging rehabilitation, work evaluation, work adjustment and skill training with industrial production in real, private industrial settings. Develops a PWI model.

University of Florida Rehabilitation Research Institute. "Projects With Industry—A Powerful Placement Tool", *Rehab Brief*, Vol 1, No 15, September 18, 1978.

Describes Projects With Industry which are contracts or jointly financed cooperative arrangements with employers, businesses or other organizations to establish projects designed to prepare handicapped individuals for competitive employment. Describes several program models including job

placement, work adjustment, skills training; combination models including job development, job readiness program of client employment services, follow along support system, and business—industry liaison and training program.

Urban Resources Consultants. *Evaluation of Projects With Industry Program Advisory Board Workshop Number 1*, Arlington, VA, February 21-22, 1978.

Materials for a workshop concerning evaluation of the Projects With Industry (PWI) program. Included in the packet are: 1) Familiarization Report (79 p), describing seven PWI's selected for assessment. Included are IBM, Menninger Foundation, MacDonald Training Center, Florida Restaurant Association, Fountain House, 2CD Rehabilitation and Research Center, and Arkansas Enterprises for the Blind; 2) Report on Pre-Test Methodology (44 p), which describes survey information, data collection, tabulation, analysis, profiles and procedures to be followed in the program evaluation; 3) Working Documents (123 p), including a literature review, PWI compliance with program performance standards, methodology for evaluation and rationale for selection of sites; and 4) Sample of participant's employer discussion sheets (8 p), a data collection questionnaire. Also includes agenda, corporate profile statement and milestone accomplishments.

Urban Resources Consultants. *System for Evaluating Projects With Industry (SEPWI): National Projects With Industry Utilization Seminar*, Washington, D.C., Mar 15-16, 1979.

Presents a concept for an evaluation system that can be used on an ongoing basis for assessment of program effectiveness and efficiency in the Projects With Industry (PWI) program called System for Evaluation Projects With Industry (SEPWI). Describes legislative background, objectives and rationale of SEPWI, field test basis, SEPWI system, and projected system automation. Includes annual report forms and glossary.

Urban Resources Consultants. *System for Evaluating Projects With Industry Program Utilization Seminar: Supplemental Report*, Washington, D.C., Mar 15-16, 1979.

Key findings and a summary of the proceedings of the National Projects With Industry Utilization Seminar. The purpose was to involve a group of working social researchers and others with practical knowledge and experience in the areas of evaluation, monitoring and reporting to review the

evaluation of "Projects With Industry" study findings and to review the "System for Evaluating Projects With Industry Program" with special emphasis on effectiveness and efficiency.

Watson, D, et al, eds. *Job Placement of Hearing -Impaired Persons: Research and Practice*, University of Arkansas Rehabilitation Research and Training Center on Deafness and Hearing Impairment, AR, 1983.

Papers given of a symposium on innovative research and practice in evaluation, adjustment training, and employment services for hearing impaired persons in Little Rock, Arkansas, October 19-21, 1982. Papers include "Employment of Deaf People", "Job Seeking and Job Retention Skill Training with Hearing Impaired Clients", "Placement of the Vocational-Technical Program Hearing Impaired Student", "The Placement Problem with Severely Disabled Deaf People", and "Projects With Industry: A Model for Placement of Deaf Clients." Each paper includes references.

Watson, D; et al, eds. *Job Placement of Hearing-Impaired Persons: Research and Practice: NARIC Rehabilitation Document Summary Number 25*, University of Arkansas Rehabilitation Research and Training Center on Deafness and Hearing Impairment, AR, 1983.

Summary of this document prepared by NARIC under NIHR contract number 300-83-0006. Brief description of each of six papers in monograph addressing employment characteristics, abilities, and aspirations of deaf people. Topics include employment, job seeking and retention, placement of vocational program graduates, college graduates and severely disabled deaf clients, and Projects With Industry.

***SOURCE: LITERATURE SEARCH, "PROJECTS WITH INDUSTRY", NATIONAL REHABILITATION INFORMATION CENTER (NARIC), 4407 EIGHTH STREET, N.E., THE CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C. 20017, JUNE 1986.**

SAMPLE

HHD CONTRACT YEAR-TO-DATE JOB PLACEMENT SUMMARY

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National Area Office October 1, 1985 to September 30, 1986 Contract Year

Report Month	Client Name	Primary Disability	Referral Source	Job Title	Employer City, State	Start Date	Start Salary	60 Day Closure
10/85	Bill Jones	Arthritis	self	Telephone Sales	Mills Garden Shop Wheaton, MD	10/8/85	3.35	Yes 12/8/85
10/85	Jane Peters	Mental Retardation	Goodwill	Groundsperson	City of Devon Devon, VA	10/30/85	3.35	Yes 12/31/85
11/85	Bob Grandy	Epilepsy	MD-OVR	Food Service	Prairie Golf Course Hilton, MD	11/23/85	3.35	Yes 1/28/86
11/85	Linda Scott	Back Problem	Kilmo Rehab Center	Floral Asst.	The Plant Shop Washington, DC	11/28/85	4.00	No:Quit 12/15/85
12/85	Mike Able	Paraplegia	self	Assistant Manager	Dennison Garden Center Gilmont, VA	12/6/85	7.25	Yes 2/12/86
1/86	Alfred Murray	Mental Retardation	Denver ARC	Greenskeeper	LBJ Golf Course Denver, CO	1/9/86	4.00	Yes 3/15/86
2/86	Donald Presley	Learning Disability	Hogan School	Floral Asst.	Flowers Unlimited Stanley, TX	2/12/86	3.75	Yes 4/15/86
2/86	Jason Stone	Legal Blindness	Tilson School for the Blind	Plant Propagator	Breeland Garden Center Hoboken, ID	2/23/86	3.40	Yes 4/29/86
3/86	Marla Ellis	Hearing Loss	MA OVR	Word Processor	Hollis Packing Company Bedford, MA	3/28/86	4.25	
4/86	Preston Alexander	Mental Retardation	Goodwill	Cannery Worker	Campbell Brothers Stanton, GA	4/15/86	3.35	

Appendix C

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HHD 60 DAY CLOSURE REPORT

SAMPLE (May be neatly handwritten)

Completed By Jane Doe

Area Office National

1. Social Security Number 987-65-4321 Client Initials R W K

2. Age 24

3. Race (check one) 1 ____ Negro 2 x Caucasian 3 ____ Mongoloid

4. Sex (check one) 1 x Male 2 ____ Female

5. Ethnic Origin (check one) :

1 ____ Africa	5 ____ European
2 ____ American Indian	6 ____ North American
3 ____ Asian	7 x Spanish/Hispanic
4 ____ East Indian	8 ____ South American

6. Education (circle the highest grade completed)

1 2 3 4 5 6 7 8 9 10 11 (12) 13 14 15 16 17 18 19 20

21 Special Education 22 Never attended school

7. Primary Disability (check one) Secondary Disability (circle one)

1 ____ Visual Impairment	5 ____ Psychiatric or Psychoneurotic Disorder
2 ____ Hearing Impairment	6 ____ Mental Retardation
3 ____ Orthopedic Impairment	7 x Other (specify) epilepsy
4 ____ Substance/Alcohol Abuser	

8. Severity of Disability (check one)

1 ____ Mild	3 ____ Severe
2 x Moderate	4 ____ Profound

9. VR Certified 1 x Yes 2 ____ No

10. VR Certifiable 1 x Yes 2 ____ No

11. Source of Income/Support at Application (eg. SSDI, SSI, Workmen's Comp.) none

12. Level of Income at Application 0.00 /month

13. Placement Date 10/1/85 Initial Earnings $3.85 /hour

14. Closure Date 12/7/85 Closure Earnings $3.95 /hour

15. Work Status (check one)

1 _x_ Full-time over 35 hours

2 ____ Part-time less than 35 hours

16. Occupational Title

SIC# 407.4071 Job Title Landscape Worker

17. Estimated Actual Cost of Case Services $ 500.00

18. Services Provided (check one)

1 _x_ Job Placement 4 ____ Referral

2 ____ Adjustment 5 _x_ Other (specify) transportation coordination

3 _x_ Counseling

19. Type Facility or Agency Providing Services (check one)

1 _x_ Private

2 ____ Public

3 ____ Combination of Both

20. Reason for Closure (check one)

1 _x_ Employed

2 ____ Terminated

3 ____ Voluntary Quit

21. Case Completion Date 12/10/85

22. Employer Incentives Utilized (circle all that apply)

1. T.J.T.C. 4. Other(s) (specify)

2. ARC OJT _____

3. Plantwork OJT _____

23. Employer Name General Lawn Care Contact Person Frank Perkins

Address 403 North Herald Blvd. Gaithersburg, MD 20877

Phone # (301) 948-1234

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A Study of Horticultural Therapy in Fairfax County, Virginia	$10.00	$12.00	_____	_____
NCTRH Membership Directory	N/C	$25.00	_____	_____
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The Development of Funds of Horticultural Therapy Programs	$15.00	$20.00	_____	_____
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Horticulture Hiring the Disabled (HHD) Projects With Industry Information Packet	N/C	$ 2.00	_____	_____
NCTRH Bylaws	N/C	$ 2.00	_____	_____
NCTRH Annual Report	N/C	$ 2.00	_____	_____
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			_____	_____
		Postage & Handling Charge		_____
		Total Enclosed U.S. FUNDS ONLY		_____

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